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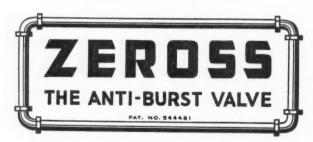
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## The Architectural Review

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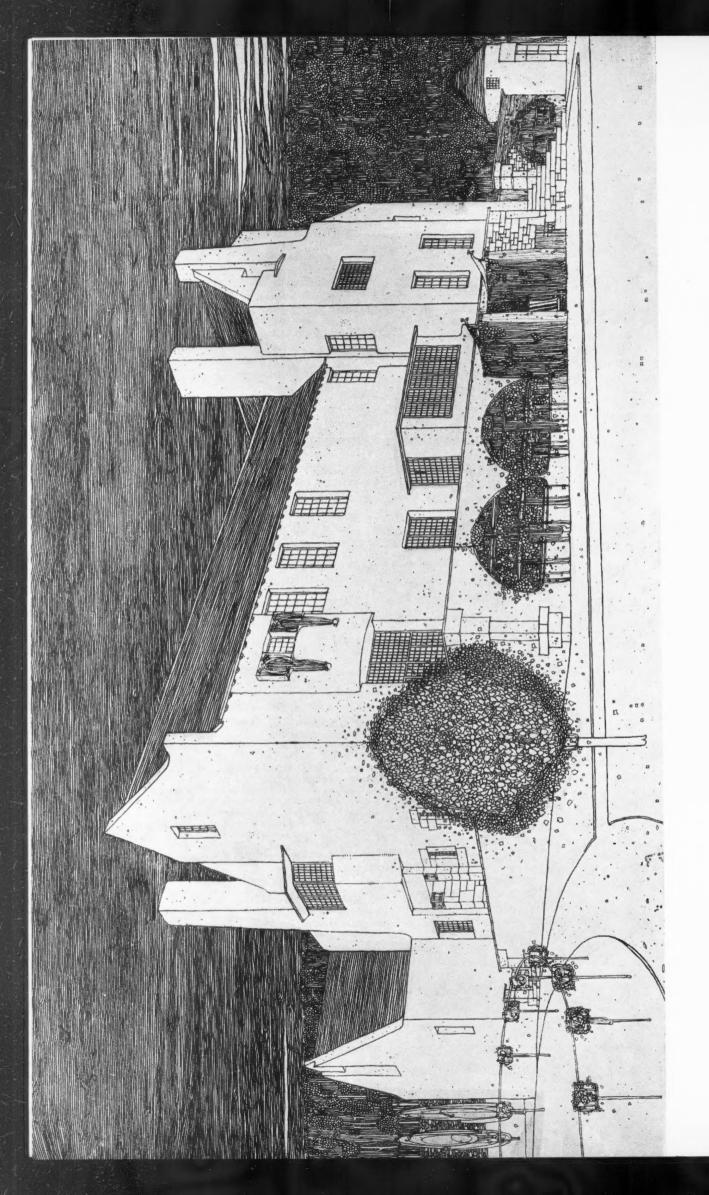
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THREE SHILLINGS AND SIXPENCE

THE GOVER. In early New Orleans, a hole two feet deep dug in the earth would fill with water in a short time. Because of this fact and because of several others equally important—the terrible inroads made by wave after wave of yellow fever, cholera, and malaria; and the psychological background of fear resulting from these plagues; as well as influences rising from such diverse sources as Catholicism and negroid superstition—the funereal art of New Orleans reached a stage of development unparalleled elsewhere in the United States. Elevated tombs had to be built, and the final result was that the cemeteries became filled with an amazing variety of tomb forms where textures and tones were combined in endlessly variant and effective fashions, plastered brick surfaces with masonry, sculptural figures, and iron, cast and wrought. The burial grounds became veritable cities of the dead; where the iron and stone concretions of hope, and fear, and love, fought against the savage violence of the vegetation.

This tomb erected to Thomas P. May in 1851, with its smooth masonry superbly contrasted with the elaborate cast iron railings, is a meeting ground in miniature between the aristocratic classical art of the eighteenth century, and the popular tradesman's art of the nineteenth. Its eloquence is proof that ingenuousness, when it is sincere, can combine irreconcilable æsthetic opposites with striking effect. On pages 34-39 C. J. Laughlin describes the regional architecture of which these tombs are a part. The cemetery itself will be illustrated in a later issue.



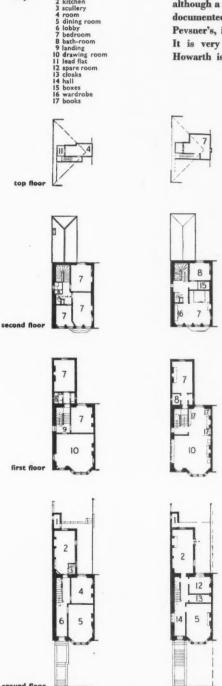


The frontispiece on the facing page is an original perspective of Mackintosh's house at Helensburgh for Mr. Blackie. This and the house at Kilmacolm for Mr. Davidson are Mackintosh's freest and purest country house designs. They date from 1903 and 1901. It was Mr. Davidson who lived in his later life in the house at Hillhead from which the furniture dealt with in the article below comes. Its entrance is the headpiece to Mr. Howarth's article.

## Some Mackintosh furniture preserved

The fame of Charles Rennie Mackintosh can by now be regarded This will, moreover, it seems, not be confined to the work of TECTURAL REVIEW. As early as 1930 John Betjeman emphasized his European and British significance in these pages, Morton Shand followed in 1934 with his more detailed account. His supreme handling of space therefore needs no further emphasis, although a more thorough exposition of his work and a properly Pevsner's, in his Pioneers, was avowedly only a first attempt. It is very gratifying indeed now to hear that Mr. Thomas Howarth is preparing a full-size monograph on Mackintosh.

as firmly established—at least among readers of THE ARCHI- Mackintosh the architect, but also comprise his work as a decorator, especially his highly imaginative and fanciful furniture. Of this a foretaste is given in the following article. In comparing the illustrations on the following page with the frontispiece on the preceding one the wide range of Mackintosh comes out very clearly, from the boldly adjusted and pulled documented and annotated catalogue are still badly needed. Mr. about Scottish vernacular of the Blackie House and other similar country houses to the wholly original designs of chairs, cupboards and the like-from an adventurously modernized Voysey attitude to one of conscious intransigeance.





On November 15, 1945, Glasgow University purchased No. 78 Southpark Avenue, Hillhead, the house in which Charles Rennie Mackintosh and Margaret Macdonald used to live and which was then occupied by the late William Davidson, one of the architect's first patrons and most enthusiastic admirers. Mr. Davidson's family have generously given the University an excellent collection of Mackintosh's furniture—probably the most representative single collection in existence—in memory of their father.

The Mackintoshes moved from their studio flat in the city to No. 78 Southpark Avenue in 1906. Though little could be done to improve the external appearance of the grey stone-built house with its narrow frontage of about 20 ft., the doorway, 1, was re-designed, and a number of windows introduced in the gable wall-fortunately the house was situated at the south-west end of the terrace.

The interior, however, was completely transformed by the removal or realignment of partition walls. Two rooms on the first floor were combined to form a spacious

L-shaped drawing room, two small front bedrooms on the second floor were converted into a single apartment and the addition of a french window and tiny balcony on the roof made a small attic into an attractive bedroom.

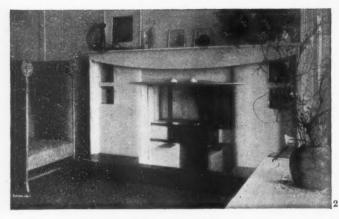
The house was decorated throughout; similar colour schemes were employed for both drawing-room and main bedroom-walls, ceilings, woodwork and most of the furniture were painted ivory-white and any tendency to monotony was obviated by the use of small areas of colour or change of texture either in the form of decorative panels of stained glass or enamel, fabrics, pictures or flowers and plants, all of which were carefully arranged to achieve a specific æsthetic effect.

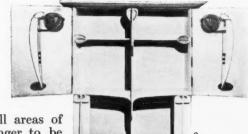
The drawing-room contains two fireplaces, the larger, 2, of these-7 ft. long by 5 ft. high—was originally designed for the studio flat and is flanked by two beautifully proportioned cabinets, 4, completely plain externally except for simple white metal hinges and handles. Each door is decorated on the inside with a highly conventionalised female figure—one of Mackintosh's characteristic motives—a decorative form which evoked a storm of ridicule in art circles fifty years ago, 3. Built-in bookshelves and a low white enamel bookcase occupy most of the wall space in the annex to the drawing-room. The secondary fireplace retains its original polished steel grate identical to that removed from the larger fireplace. Apart from these distinctive features, the rest of the furniture consists of a number of interesting chairs and small tables of varying design in either dark oak or white enamel, many of which were exhibited on the Continent in the early years of this century, when Mackintosh's style was so much admired by the most progressive architects and designers.

The main bedroom contained an enormous canopied bed, 7, twin wardrobes, decorated with a curious bird motive in high relief, 6, a dressing table, a tall rather impractical mirror, a number of charming bedside tables, and several chairs, 8, all of which were painted white. The austerity of this room was relieved

32

before





by embroidered bed-hangings, curtains, stencilled fabrics and small areas of coloured enamel inlay. The original fabrics and carpets are no longer to be seen, but all the furniture remains except the bed which, for the present, has been

The principal rooms thus retain much of their former charm, though the sombre ground-floor dining-room with its black woodwork, heavily stencilled brown wallpaper and dark oak furniture (now removed) has been redecorated recently. The entire bedroom suite and the drawing-room furniture forms the

major part of the Davidson bequest.

No. 78 Southpark Avenue is not intended to be a museum—it is occupied by a senior member of the University staff—but it is hoped that future extensions to the University buildings will provide accommodation for a permanent exhibition of the architect's work. A comprehensive collection of the Mackintoshes' drawings and sketches, along with a number of Continental periodicals illustrating their work, may soon be secured for the University art collection. From the cultural point of view this will be an admirable arrangement and it is hoped that sufficient interest will be shown in the matter to assure the University that it has been justified in securing for posterity at least some of the work of this great architect.

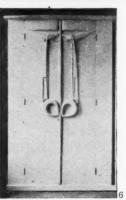
Thomas Howarth

THE PHOTOGRAPHS. 2 is the lounge fireplace as originally designed. The mantelpiece is in white enamelled wood and the grate of polished steel. The fender is of lead decorated with three circular motifs in green opaque glass. In recent years the grate has been removed and the interior of the fireplace remodelled. The box chair on the left is in dark oak upholstered with unbleached linen. 3 and 4 are one of a pair of white enamelled cabinets now flanking the principal fireplace in the lounge. Inside, the three heartshaped motifs have rose-pink enamel fillings. The conventionalised female figures are formed of blue, white and rose-coloured glass, inlaid flush with the silver painted surface of the doors. The chair, 5, is white enamelled too. Its back is about five feet high. The upper part of the back is carved from the solid, and the lower motif is stencilled in green and mauve on to the cilled in green and mauve on to the

unbleached linen upholstery. 6 is one of two twin wardrobes in the principal bedroom. The decoration is in
high relief. The dominant feature of the room is of
course the bed, 7, a four-poster with an open canopy and
embroidered silk hangings. The carved centre post is
decorated with small pieces of stained glass. This bed
is now dismantled. The photograph shows it in its
original position. Again from the bedroom comes the
chair, 8. The back consists of a tightly stretched linen
strip decorated with a stencilled floral pattern in green
and rose.

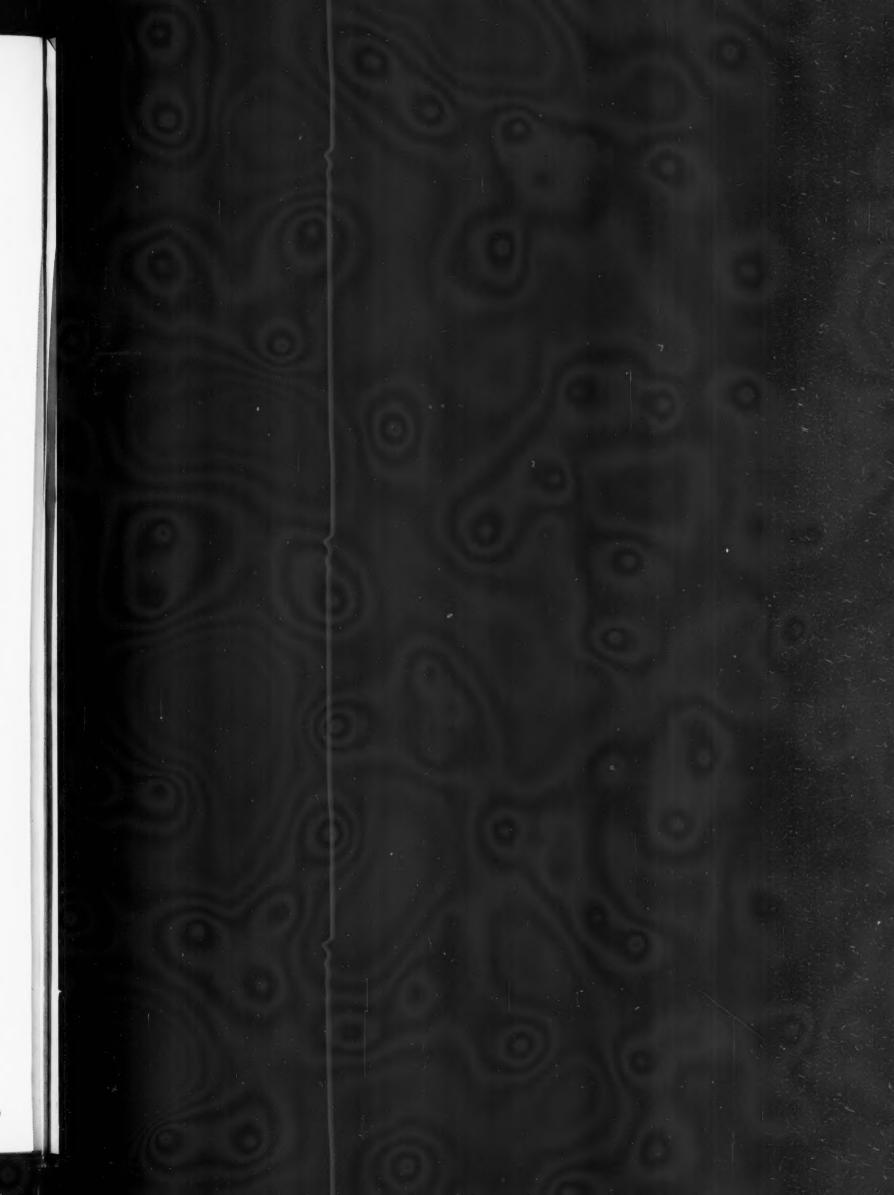








Photographs 1, 2, 7 by the late Craig Annan; 3, 4, 5, 6, 8 by the author.





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## THE ABOUTECTURE OF

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## BRIKANS

## BA G. J. PVARBHFIN

HE French, foreseeing its strategic importance at the mouth of the greatest river valley in North America, founded New Orleans in 1718 (authorities differ as to the exact date). In its growth, a number of factors—quite different in character from those affecting any other New World city—played a distinctive part.

Early New Orleans had a physical background unlike any other large city of North America. A ring of swamps, lurking with malaria, practically surrounded it; the great Mississippi, its tremendous bulk shored up by means of earthen levees, virtually hung above the city; the very floor of New Orleans was water-logged (some portions of it being actually below sea level) so that buildings tilted and sank, and graves dug in the earth filled with water; the heavy rainfall and the fierce sun stimulated the plant life to a violence, and the insect life, to an abundance, exceeded only by that of the deepest tropics. And time and again, during the nineteenth century, the plagues came-cholera, typhoid and malaria, yellow fever and the bubonic plague bearing off their victims by the thousand; so that New Orleans, one of the most beautiful cities of that day, became also, possibly, the deadliest.

As might be expected, the stringencies of such an environment produced their inevitable reaction on the largely Latin character of the city's inhabitants; particularly so because of the city's concurrent great wealth. New Orleans became pleasure loving and gay to a degree unmatched by most other American cities—though always there existed an undercurrent of the macabre. Profiting by its incomparable position as a great port, which enabled it to preserve an active life-line with the culture of France, and seemingly spurred on by its physical isolation from the rest of the

United States, New Orleans, early and fervently, encouraged the arts of music and the stage. And it, in time, from French and Spanish origins (French predominating) gave birth to an architecture more indigenous in feeling than anything that can be found in the entire Mississippi valley. The physical factors mentioned above, interacting with the psychological factors to which they had given rise, had an indirect, but decisive, part in moulding the character of this architecture.

It is in two respects that this special and localized feeling—which, incidentally, manifested itself much more in the exteriors than it did in the interiors of the buildings—appears at its most significant:—

(a) The quality, and the general excellence, of the small buildings (or the "cottages") of early New Orleans. The very earliest buildings, of course, were nearly all wood (since New Orleans was a frontier settlement)—most of these, with but few exceptions (see 8 and 28) were completely destroyed by the two great fires of 1788 and 1794. Because of these disasters, it was decided to re-build in brick, and an example of the original method of construction of such structures is shown in 15. Known as briquette entre poteaux, it consisted of using a framework of timbers, packed in between with soft bricks, and supporting a segmented tile roof, whose flashing and chinking was done with mortar. (None of these tile roofs is left on any

LABRANCHE MANSION

This famous old mansion on Royal Street was built about 1838 by Jean Baptiste Labranche in the heart of the French Quarter. 1 excellently illustrates how completely the iron forms came to encase the building forms, so that an organic relationship was established. These galleries exhibit the final stage in the evolution of the cast iron galleries. Practically all the important features of such galleries are shown in 2-worked out completely in terms of the well-known oak leaf and acorn pattern—the elaborate brackets, the crestings on the railing panels, the floor fringe (with here a still further fringe of hanging acorns added) and finally, the spur-like devices attached to the columns themselves. These, ostensibly, were used to discourage intruders, but actually, formed an important decorative note in that they were usually spaced beautifully between the column pedestal and its reduced capital.

#### THE VIEUX CARRÉ

This designation included all of the old city proper. It was originally enclosed by earthen ramparts, surmounted by cypress palisades, below which was a wide moat. Beyond were the swamps. Five forta were arranged about these walls. At its heart was Jackson Square, the old Place d'Armes. On the eastern side of this Square was the Mississippi River—its banks curving inwards towards the centre of the city; on the western, St. Louis Cathedral, and the old government buildings. The Vieux Carré became, and remained, the centre of Creole life.

#### ST. LOUIS CATHEDRAL

St. Louis Cathedral which, incidentally, is architecturally not a true cathedral at all—since it has not the transepts belonging to the authentic cruciform arrangement—is the third church to stand in this position facing Jackson Square. The first structure, of a very primitive kind,

was destroyed in a hurricane in 1723, the second, in the great fire of 1788. The present building was erected in 1794 from funds donated by a wealthy Spanish man, Don Andres Almonester y —whose daughter, the Baroness de nobleman, Don Andres Almo Pontalba, erected the buildings facing the other two sides of Jackson Square-Pontalba buildings, among the apartment houses in America. markedly Spanish character of the 1794 building was somewhat modified by alterations made in 1851, by J. N. de Pouilly, who raised steeples on the towers, and added the present portico, with its colu and pilasters. To one side of this picture can be seen part of the railing surre the equestrian statue of General Andrew Jackson, hero of the Battle of New Orleans,

#### THE CABILDO

On the southern side of St. Louis Cathedral is the Cabildo-formerly the quarters of both the French and the Spanish governing bodies. The present structure was erected in 1795, and succeeds two earlier buildings-both of which were destroyed in fires. It was in this building that the papers ceding Louisiana from France to the United States building, constructed of plastered brick, is one of the outstanding examples of Hispano-Moresque architecture found in the United States. In 1847 a French mansard roof was added to the original two-story building, which a flat tile top. The French called the building the Maison de Ville. The Cabildo railings are among the finest exa of early wrought iron in New Orleans
—and the patterns bear some relationship to certain French designs of the seventeenth century. The Cabildo now houses the historical section of Louisians State

## THE PRESBYTERE

On the opposite side of St. Louis Cathedral from the Cabildo, and built along the same

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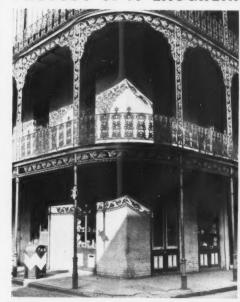




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## PHOTOS: C. J. LAUGHLIN



The study of regional architecturethat is, of architecture considered in relation to a geographical, as against a purely historical, framework-has in England been almost totally neglected. The reason is perhaps not far to seek, being inherent in the smallness of the country and the close interlocking of the various regions. In America the case is very different, for the extreme isolation of the early settlements produced marked regional styles which persisted (with modifications due to new materials and techniques) right down to the latter part of the nineteenth century. Here Mr. C. J. Laughlin describes the architecture of early New Orleans and the circumstances which made it what it was-a popular, non-professional architecture, fruit of a popular imagination "infected by the endemic combination of the beautiful and the sinister, of wealth and disease."

THE ABOUTECTURE OF NEW ORLEANS





















existing building.) All walls were then plastered over to seal the bricks, and dormer windows were added to the steeply sloping roof (designed to handle the heavy rainfall). Afterwards, cypress troughs, supported on wrought iron hooks, were added to the eaves to make rain disposal more effective. Buildings of this kind (see 9-12, 15, 26 and 27) were intended primarily to live in-not to show off wealth or a sterile imagination—and to live in in terms of the special and particular environment New Orleans possessed-with its combination of intense heat and humidity, together with a shifty and uncertain soil. They had no pretence of being what they were not. Very simply, very directly, and very successfully they dealt with the environment in terms of itself-the clay for the bricks and the materials for the plaster and the marvellously good mortar which was used, were integral parts of the local physical background; the timber for the beams and floors came from the eypress swamps (the cypress wood was especially effective in withstanding dampness) and with the help, later, of wrought and cast iron (which last particularly received the indelible stamp of an indigenous feeling despite the fact that a great deal of the iron was manufactured elsewhere) these materials were integrated into structures which were, for their periodin the true sense of the word-functional. They accomplished this without pretence, without harking, imitatively,

general plan, stands the Presbytere, known to the Spaniards as the Casa Curial. It was begun in 1794, but not finished till 1813. It, too, had a mansard roof added later. And, like the Cabildo, it has a wide arched portice running the length of its facade. The design used in its wrought iron railings, however, differs from those of the Cabildo.

#### DAUPHINE STREET

Here is a representative cross section of the Vieux Carré. The two fundamental types of habitations are shown—the one-storied cottage type (with its beautiful dormer windows, its wide, closely spaced shutters and their wrought iron hinges, and its little steps that let directly on to the sidewalk) and the two or three-storied balconied type. Note the iron strengthening devices set in the soft brick walls of the larger building—this was the usual practice in New Orleans. No buildings higher than two stories were erected in New Orleans before 1811, because of the treacherous nature of the soil. The cottages shown are somewhat earlier in date. The large door on the nearer side of the larger building opened into a covered passage which, in turn, led to the courtyard.

#### ST. ANN STREET

The two outstanding types of French Quarter dwellings can be seen here in greater detail. The nearer structure dates to the late eighteenth century, and is said to have been built by refugees from Santo Domingo. The larger structure is early nineteenth century design, and its ironwork illustrates the evolution of the iron baleonies into the galleries. The screen of curving rods at one end of the gallery was known to the Creoles as a garde de frise, and later appeared in some much more elaborate forms. Peculiar spur-like contrivances will be noted attached to the columns supporting the gallery—these can be seen better in 1. The floor of the gallery, was supported by iron straps embedded in the brick walls,

with their further ends resting on the columns.

#### MADAME JOHN'S LEGACY

Now considered the oldest existing structure in the Mississippi valley, this building was erected in 1726 by Jean Pascal, a sea captain from France—who lived here till he was alain by the Indians. It is one of the most authentic examples of Louisiana, colonial architecture. It is actually a raised cottage—its bottom portion not originally having the present wall—down here slaves were kept. The house is raised to escape the dampness from the marshy soil. The lower walls are of brick, the upper of wood. Weoden colonnettes support the hipped and dormered roof.

#### ST. ANN STREET COTTAGE

In this late eighteenth century Creole cottage on St. Ann Street can be seen the general character of the small buildings of the period.

This is a direct rear view of the same building seen in 9—with its hand-plastered column and arches; while to either side the two slave quarter structures thrust in their wooden railings. The kitchen of this cottage was on a different level from the other rooms (something quite rare in the old buildings of New Orleans)—this was done in order to find space below the kitchen for wine storage, since no true cellars could be dug in the early city because of water seepage.

The structure seen partly to the right of 10 can now be viewed diagonally. It was used originally as living quarters for the slaves. To the extreme left is the opening to the wine storage space of the main house, while to the lower left is the base of one of the wooden cisterns which were

to Europe for vanished splendours; with a simple dignity, an unsophisticated self-assurance which often puts to shame the hollow and meretricious grandeur of those less successful members of the later Greek Revival mansions. As mentioned, plastered brick and cypress wood were the main materials of these houses—stone was used but very seldom in the old buildings of New Orleans—since there was no stone of any kind to be found anywhere near the city.

(b) The evolution of the iron balconies into the galleries (in the two- and three-storied buildings succeeding the "cottages"). In nineteenth century New Orleans, a new departure was made in the architectural use of cast iron. First, however, it should be mentioned that the development of the iron forms of New Orleans can be divided, roughly, into three periods: 1, the wrought iron of the period 1800 to about 1825 (European influence on New Orleans iron shows chiefly in the wrought iron) (see 4); 2, a period overlapping the other two, when both wrought and cast iron were combined in one balcony or railing-usually with the structural portions wrought, and the individual ornaments cast; 3, the cast iron period from about 1825 to 1860. By 1840, cast iron was predominant, because of its lower cost, and because of the huge variety of designs which could be achieved with it. There is no doubt that the necessity to be able to seek free circulation of air, and yet

the only means of catching rainwater for drinking purposes, and were used exclusively in New Orleans before plumbing was invented.

ST. PETER STREET COTTAGE Of all the old one-story structures in the Vieux Carré, this cottage is one of the most delightful in treatment. Note the naive wooden fringe depending from the eaves, the fine proportioning of the doors and shutters, the hand-carved wooden railings behind the shutters. Note, too, the little rectangular iron grille near the juncture of the wall and the sidewalk placed to provide ventilation beneath the first floor, so that the dampness rising from the moist soil might not cause clothing and shoes to mould (as often happened). Nearly all of the old buildings of New Orleans have these ventilators —and later, they appeared in much more elaborate forms. The house is very early nineteenth century.

BARRACKS STREET HOUSE

One of the most interesting large corner dwellings in the Vieux Carré is here seen. Very few alterations seem to have been made to it. It expresses the particular contrasts and harmony of Creole life. Its walls, silvered into a luminous transition between white and grey, blend with the shutters of soft indeterminate green. Its fine and simple ironwork well illustrates how the single wrought iron balconies were handled on corner structures. Oncer iron canopies have been added above several of the long windows-probably about the Civil War period. In a house such as this, small shops usually occupied the first floor, the owner's residential quarters were on the second. This house is about 1830.

THE NAPOLEON HOUSE

More than 150 years old, this three-storied

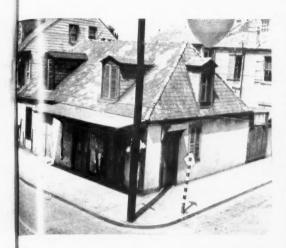
structure of brick and plaster is still in excellent condition. The lower building toward the right was once the slave quarters, and it is directly connected with the larger structure. Many of the outstanding characteristics of the Creole architectural style are exhibited in this building; note particularly the treatment of the plaster work around the window frames. The old iron cupola on the top of the house, however, is unique. At one time the residence of Mayor Nicholas Girod, it has been associated for many years with legends concerning an expedition to be fitted out for the rescue of Napoleon from St. Helena. Napoleon, however, died before the expedition could become a reality.

15 LAFITTE'S SMITHY

Legended as the place where Jean LaFitte and his pirate associates once operated a smithy as a blind for more nefarious activities—records show this building to have been in existence in 1772. Plaster crumbling from the walls, reveals its method of construction—the briquette entre potesux method to which reference has been made in the article.

FAUBOURG MARIGNY MANSIONS
In the Faubourg Marigny there still exists
(in part) a huge group of old brick mansions
which is one of the most impressive
survivals of early New Orleans. These
buildings date back to the very early 1800's
—if not before, Gable roofs, high narrow
balconies, beautifully proportioned windows
and arches characterized these structures.
Apparently all the buildings were interconnected—many of them have collapsed.
Here we see two of the corner structures
in the group. Note how a roof has been
added to the original wrought iron balcony.

FRENCHMAN STREET BUILDING
With its twin wrought iron balconies, this
building is a good example of the general











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page 37



to avoid the hot sun, was involved in the amazing development of the iron balconies of New Orleans. The first single-tiered, uncovered wrought and cast iron balconies, in the hands of the people of New Orleans during the period 1840-1860, evolved into the iron galleries—definitely architectural, definitely functional, but never narrowly utilitarian. The galleries—unlike the balconies—projected completely over the banquettes (or sidewalks); they were roofed, as tall as the rooms, one or two-storied, and supported by slim columns set on the curbs, whose elegance and beautiful proportioning were a direct outgrowth of the complete consonance of their design with the strength of cast iron.

But the galleries, in many cases, were not mere decoration—as is often supposed. The façades of the best plastered brick structures of old New Orleans are characterized by an exquisite softness of line and colour; by both delicacy of detail and great variety and freedom of pattern in the iron panels; and, as well, by a close integration of the form of the building with the character, and proportions, of the iron work. The complete fusion between iron and plastered brick which was often reached, achieved an organic totality. In this organic totality the factors represented by the particular climatic conditions of New Orleans, the materials which were then available (cast iron, cypress wood, locally made brick), and the specific psychological needs of the

type of larger structures found in the Faubourg Marigny. The structure immediately behind the main building, and towards the left of the picture, was the slave quarters. The owner's shop was located on the ground floor.

18 FAUBOURG MARIGNY MANSIONS

Here is shown the rear of the two buildings in 16—looking in a diametrically opposite direction. Note how the collapse of the building to one side has accentuated the citadel-like effect of the walls, also the fine fan window in the shadow of the gable wall. Within the nearer walls is the courtyard. This is a fine survival of the Creole communal life of early New Orleans.

DUMAINE STREET

Looking eastwards along Dumaine Street we can note how extensively New Orleans architecture was associated with iron. On high narrow galleries such as these, the Creole people spent much of their leisure time—using them for resting, cating, and reading for the greater part of the year. On hot nights they could also be used for sleeping. Towards the lower right can be seen part of Madame John's Legacy, 8.

Esplanade Avenue became the most fashionable street of the old city, lined with some of its most palatial structures, and also formed the northern boundary of the Vieux Carré. Here the Creoles lived surrounded by palms, live oaks and banana trees (examples of these can be

ESPLANADE AVENUE MANSIONS

seen behind the garden wall to the right of 20). This structure well represents the houses of the neighbourhood, and was probably erected about the middle of the nineteenth century. Note the treatment of the turret and the side galleries; beyond the palm tree can be had a glimpse of the servants' quarters. 21 shows the balconies attached to the facade of this house. In the railings and standards of these balconies the three-rose motif is embodied in a state of incomparable grace and delicacy.

22

BEAUREGARD HOUSE

Though this building has, in part, the feeling of Greek Revival architecture, it was erected as early as 1826 by Joseph Lecarpentier, some time before Greek Revival was made fashionable in New Orleans by James Gallier and his sonwhich was around 1845. It was at one time the home of Beauregard, the famous Creole general of the Confederacy. Its twin wrought iron staircases are probably the finest exterior staircases in New Orleans. Despite our first impressions, though, the building as a whole does not have the coldness we often associate with Greek Revival, for it is not built of stone, which is the most natural and authentic material for the Greek Revival style; on the contrary, the use in it of brick and plaster and wood—the most suitable and inevitable materials for relating early New Orleans architecture to its physical background-give it a softness of line, and a sequence of textures characteristic only of the peculiar New Orleanian (or Creole) fusion of French and Spanish styles preceding Greek Revival.

23

HOUSES OF THE THREE SISTERS

There were three of these houses erected—probably during the 1850's; they were unlike any other old buildings in the Vieux Carré. Standing side by side, they were known as the houses of the Three Sisters. All three were almost exactly identical. In them appears some of the strange architectural mixtures that occurred so often in New Orleans after 1850. Note the carved wooden Corinthian columns with

facing page 38]

people of that particular period had reached a harmonious and truly functional solution. So true is this, that often when a gallery is pulled off a building the entire feeling of the building is lost—the organic harmony has been destroyed.

Meanwhile, the Creoles (as the mixture of the original French and Spanish settlers came to be called) had contrived to arrange their more than one-storied buildings around courtyards filled with a profusion of plants, and secure from the searching sun by high walls, whose bricks held the cool dampness. Here they could live in the heat of the day; in the evenings the lofty aerial galleries gave them a less restricted view, a freer movement of air, a sense of the mystery of space and of night. In time, many of these iron bowers had their standards laced with the hardly more intricate tendrils of tropical vines. By an interesting extension, flowers and trees peculiar to the semitropical climate of southern Louisiana began to re-appear in the designs used in the iron panels of the galleries—the live oak, the passion flower, the morning glory, various lily patterns. What distinguishes the use of cast iron in the lower Mississippi valley is not only its remarkable architectonic integration with the forms, and the functions, of the plastered brick, and even wooden, buildings-nor yet its further integration, in the cemeteries, with the

pseudo-Egyptian capitals with acanthus leaves, the railings with a modified French Empire design, and the addition of the raised verandah to the basic Greek Revival form. Two of these buildings have since been completely destroyed (to enlarge parking lots); a third still stands.

#### DECATUR STREET

Much of the softness of line, delicacy of colour, and gracefulness of ironwork characteristic of the best of the old buildings of New Orleans is present in this building. Note the fine wrought iron balcony; and the elongation of the upper windows by means of wooden panels in order to get more effective proportions and more pleasing contrasts of surface. This building is about 1830.

#### HOUSE OF THE GIANT

Here is one of the most remarkable structures to be found in the Faubourg Marigny. From its doorway, which rises almost two floors, the original gas fixture still protrudes; the baleony is a very severe early design; while the facade rises up into a false front, rather than a parapet. This is clearly the work of an unsophisticated imagination—but the structure still has much of the lost and highly individualized simplicity which marked much Greole architecture. The date of this house is about 1850.

## COTTAGE WITH WIDE DOORS The Faubourg Marigny, originally part of the huge plantation of Baron de Marigny, lay roughly north of the Vieux Carré proper. Its earliest buildings date back to the last quarter of the eighteenth century. Note the wide doors of this cottage, intended, no doubt, to get maximum circulation of air; and the way the whole facade of the house, with its soft colouring, is integrated by means of the simple and severe moulding.

27 COTTAGE WITH PILASTERS
This very fine cottage of the Faubourg
Marigny presents a quite unusual feature—
the use of pilasters near the extreme ends
of its facade. This feature is not
repeated elsewhere in New Orleans.
Note, too, the arrangement of the chimneys
along the gables, and the treatment of
the doorway. In such a house as this,
the doorway gave entry to a central hall
which ran straight through the house to
its rear, the rooms being on either side.

#### FAUBOURG STE. MARIE

The Faubourg Ste. Marie was the first American section of New Orleans. Settlers and merchants from further north up the Mississippi valley, not getting along very well with the Creoles, started to build it up in the latter part of the eighteenth century. It was roughly south of the Vieux Carré, and ran down to the river.

#### SARPY PLANTATION HOUSE

This is the oldest existing house in the Faubourg Ste. Marie, and one of the oldest in the entire Mississippi valley. Together with Madame John's Legacy, 8, it is among the few remaining examples of the earliest Louisiana colonial architecture. It was erected in 1764 by Delord Sarpy, a wealthy planter. Since it was outside the city's walls, it escaped the two great early New Orleans fires, but it has long since been swallowed by the growth of New Orleans. The portion which abuts on the street is not actually the facade of the house. Its true front has been blocked up by the sheet metal garage seen to the left, and from this front, in former years, a magnificent avenue of oaks ran down the river. Since those days, even the river has changed its course, and the house is now only a boarding house.

ANNUNCIATION STREET MANSION
This is (or was) one of the most interesting
of all the original houses of the Faubourg

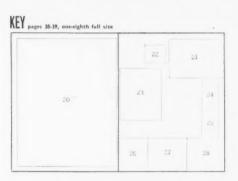


THE ARCHITECTURE OF NEW ORLEANS













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THE ABOUTECTURE OF NEW ORLEANS

romantic poetry of death. It is, ultimately, its profound relationship with the whole psychological background of that time and that place; and the struggle of the human mind against the minatory potentialities of a semi-tropic environment, with its sinister combination of beauty and disease.

Another element in the indigenous quality achieved in the best New Orleans buildings consists in the naive treatment of many of their designs, the fantastic character of many details, such as the iron accessories of the galleries. This element arose partly from the frequent lack of formal architects. Many owners designed and built their houses themselves (with the aid of slaves) and thus the quality of the people themselves came through more directly; the architect, trained elsewhere, would not have been so sensitive to local psychological peculiarities. And the imagination of the people, it must again be stressed, was imprinted and infected by the endemic combination of the beautiful and the sinister, of wealth and disease, that for so long a period coloured the city's history.

Some of the finest examples of the fusion of the naive and the fantastic are to be found in the ancient cemeteries of New Orleans. Also, most of the good stone work (the stone having been brought from far New England) is in these burial grounds. Limited space prevents any further analysis

Ste. Marie. The neighbourhood around it has now turned into a slumnegroes now live in the house. The original gates have vanished; the railing to the right is obviously a cheap replace ment of the original railing to the left. In this house are visible some significant departures from the types of houses originally introduced by the French and -for instance, the highly modified corbel steps used on the facade. The general proportions of the house differ, too, from those Vieux Carré dwellings which are most like certain Europea structures. Unlike most Vieux Carré buildings, too, it was deliberately designed with a double entrance. The spacious galleries, whose ironwork represents the very rare passion flower and morning glory motifs, have an intricate and incomparable grace. Since this picture was made, all the ironwork has been stripped off the house. Its date is about 1850.

MAGAZINE STREET MANSION Here is a characteristic example of the indigenous manner in which New Orleans builders, in the period from about 1860 on, tried to combine iron, wood, and brick.

#### SOUTH RAMPART STREET

An excellent example of many houses of this kind to be found throughout the Faubourg Ste. Marie, this building presents a very careful, and effective, proportioning of the door and window frames with the iron rectangles of the balcony. The iron anthemions are in particularly good condition here.

### 32 CAMP STREET

A typical architectural arrangement of this section around the 1850's is exhibited by this rear view of a group of brick buildings facing on Camp Street. Close-set wings run out at right angles to the group (these wings were servants' quarters originally), while tall narrow galleries were so arranged as to get the maximum amount of circulation of air, and the minimum amount of direct sunlight. The building to the right still has its original iron shutters.

#### SOUTH RAMPART STREET

In the last part of the nineteenth century, when wealth diminished, the builders of New Orleans were forced to make an increasing use of wood in architecture. They began repeating in this medium many of the forms they had used earlier in plastered brick. The treatment of the cornices, brackets and parapet of this house (whose forms are due to plastered brick originals) and the special fusion of iron and wood here embodied (despite poverty they still could not entirely abandon the use of iron), represents an architectural development peculiar to New Orleans. The pattern in the railing is the late 1880, and very common, shell design. By this time the ironwork had lost most of its delicacy, and had become obviously mechanical in feeling.

#### WILLIAM BRAND MANSION

This great building is said to have been erected in 1802-if so, that is unusually early for Greek Revival. William Brand. an architect and engineer from Scotland, built it. The Ionic columns, as well as the thick walls of this building, were of cement-covered brick. Wooden dowel pins were used in the attic rafters, and hand-wrought square nails elsewhere. For nearly a half century William Brand's house was a social centre for the most prominent of the city's citizens. In 1849, however, when the expanding business section began to creep around it, its owner allowed the building to be converted into a counting house for the old Canal Bank. In 1938 it was demolished to make a parking lot, and the photograph on the left shows its columns looming tragically amid a mass of wreckage.

here of the psychological origins of the amazing growth of funereal art in New Orleans. This growth undoubtedly deserves an important place in any history of the development of the art forms of the United States, but has not, as yet, been given attention in any of the formal histories.

Old New Orleans, as it grew, was divided into faubourgs. A short description of their location and their histories is given in the captions.

By 1840, New Orleans had become the second port of the United States. Wealth poured in, and as a corollary of this, came the spread of the Greek Revival influence in architecture (22 and 23, 34 and 35) and the rise of the great plantation houses, some of them enormous in size—their furniture and decorative objects often brought from Europe.

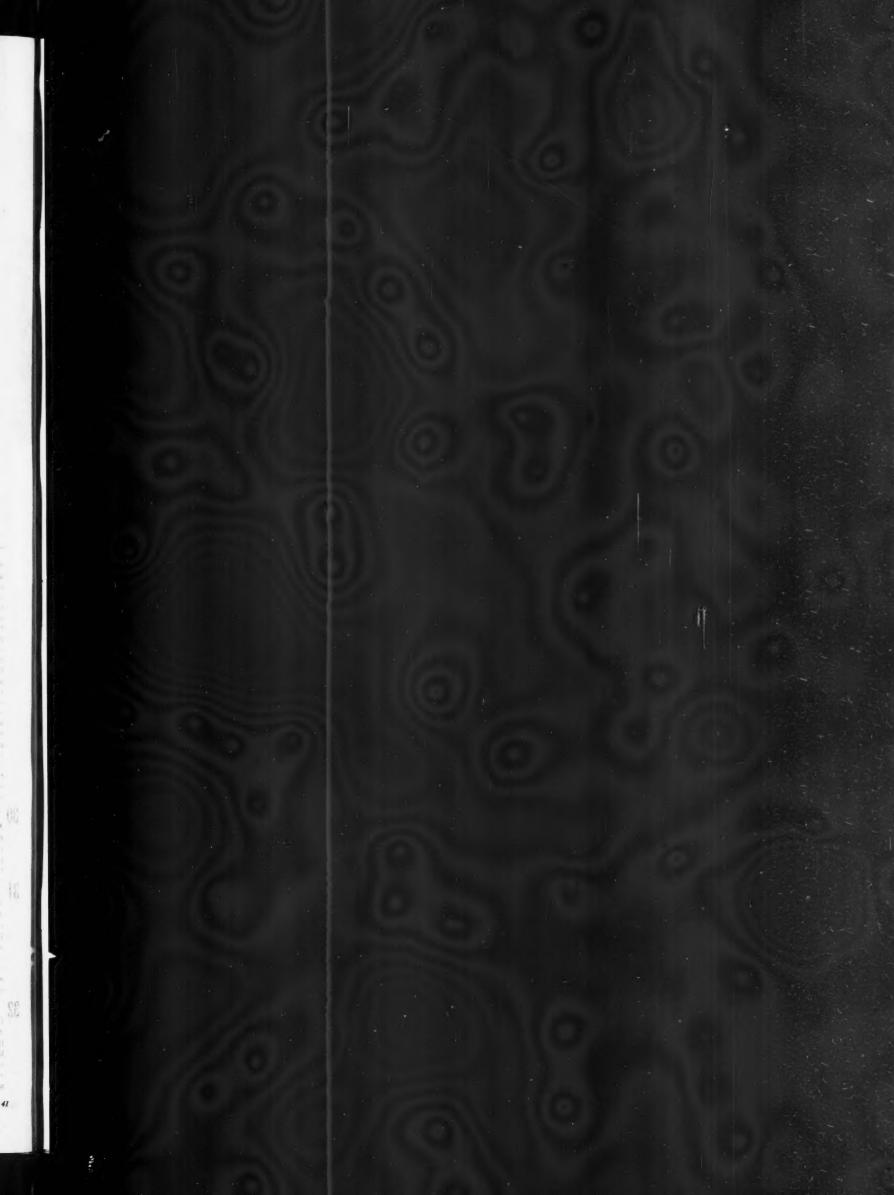
However, with the after-effects of the Civil War, and the later collapse of the sugar market, a tragic period of decline set in, beginning roughly about 1880. Many of the finest old buildings in New Orleans itself (excepting, partly, those of the Vieux Carré—inadequately preserved because of the tourist trade) were torn down, and many of the plantation houses were left to the elements. Even in the Vieux Carré, some of the largest and most impressive buildings are now gone—the French Opera House (one of the city's most magnificent buildings) in 1919 from fire; and the old St. Louis Hotel-one of the most extraordinary buildings of its time in this country, and one of the first hotels in the United States-in 1841, also from fire. It was completed in 1838 by two brothers, J. N. and J. I. de Pouilly, whose cellular method of supporting its great copper-plated dome over a structure whose foundations were in marshy soil, went back, on the one hand, 1,400 years to the early Christian churches of Ravenna (notably the Church of S. Vitale and the Orthodox Baptistry) and forward, on the other, to the devices of some contemporary modern architects. They reduced the weight of the dome to at least one-eighth of a masonry dome, and kept its thickness to twelve inches by using, as its chief material, a layer of clay cylinders. By brilliant architectural perception, they arranged the axes of the cylinders along the radius of the dome, so that, unlike the Ravenna domes, the round ends of the cylinders were presented, rather than their sides.

Less commercially minded than some other tourist centres of the United States, New Orleans has not "prettified" its remaining old structures to as large an extent as Natchez and Charleston, for instance. Unfortunately, it does not possess any good modern architecture, with the possible exception of Louisiana State University Medical Center—one of the greatest in the South. But it is still one of the few cities left in the United States with any individual flavour.

The material appearing in this article will later be presented, in an expanded form, in a book to be entitled "Lost New Orleans," which will deal with the authentic quality of the old buildings of New Orleans, with the psychological origins of that quality, and with the streets which are lost in time.

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## INTERESTING MATTER

relating to the scenery, decoration, etc. of the Theatre Royal at Ipswich compiled by H. R. Eyre and here annotated and discussed by Richard Southern



A DOCUMENT of the highest interest to the history of English theatre building has been recently brought to light in the Central Library, Ipswich. It is a richly illustrated manuscript-scrapbook of 174 pages and bears the title Interesting Matter relating to the Scenery, Decoration, etc., of the Theatre Royal, Tacket Street, Ipswich. Compiled by H. R. Eyre. No date is inscribed, but from internal evidence the compilation probably took place in the early nineties.

H. R. Eyre may, I think, claim our attention for a moment; he can be justly called one of the outstanding figures among students of the English theatre. Not only did he possess a true and voracious interest in his subject, but he approached it from the all-too-rare direction of strictly practical and concrete fact. Not for him the gossip of the green room, nor the attempt to assess the importance of this or that vaunted player; instead he would delight in the measurement of a trap, or in the alterations of a green-box front. He was fascinated by scene-painting, but instead of vague imaginings over the province of scenic illusion or over De Loutherbourg's vanished eidophusikon, he set himself to find out just how much treacle William Burgess (scene painter at Ipswich) added to size paint to prevent cracking, and he prepared copious illustrated notes on the achievement of effects in distemper; furthermore, he studied and made other notes upon the Ipswich circuit and its management. But these two subjects he bound separately, keeping the material relating to the actual fabric of the Theatre Royal, Ipswich, for one, and by far the largest, volume of his work, and enshrined it there in his painstaking handwriting and his often original spelling.

The theatre in Tacket Street (earlier Tankard Street) had a chequered history with its moments.

The theatre in Tacket Street (earlier Tankard Street) had a chequered history with its moments of histrionic achievement and its periods of decay and poverty. It must have been like many another small provincial playhouse of the nine-teenth century, but it was a subject of absorbing interest to Eyre, and so it is pleasant to note, in a newspaper cutting of 1887, that at that time Eyre himself had become manager of the theatre. Its story was by then, however, drawing to a fighting close. Despite the efforts of the manager to modernize the house—and his innovations are

all set down and make fascinating reading—the theatre had only three more years to live. In 1890, it was finally sold and later occupied by the Salvation Army. To-day little remains except this vivid, illustrated manuscript, which forms possibly the fullest example of the private papers of a public playhouse to be found in Britain.

Eyre's manuscript contains some thirty large folio pages of notes, thirty-two plans of the building and its details at various periods of its history, ninety-three drawings and details of the interior decorations and stage equipment including some actual specimens of the wall- and ceiling-paintings peeled from their surfaces at periodic redecorations, nineteen colour-drawings of pieces of stock scenery and of curtains and act drops, beside odd sketches of the exterior and—one of the most interesting items of all—an actual photograph of the interior of the playhouse, dated 1889.

The manuscript begins with a historical note describing the early use of inn-yards in Ipswich for theatrical performances and gives a brief allusion to the first theatre proper built there in 1736, whose stage, we read, was only twelve feet deep, but was nevertheless the stage on which the crowned king of all English actors first trod before the public in 1741 under the name of Lyddal in Southerne's play *Oroonoko*—the actor whom we know to-day as David Garrick.

Evre then settles to his main test, the decomin

Eyre then settles to his main task—the description of the building opened in 1803 of which he himself finally became manager. His first illustrations in this section are a front elevation and plan, copied by the scene painter, William Burgess, from originals made by Robert Fulcher in 1810, title piece and 1. We see a tiled pitch roof over a plain square façade, with an architrave over the central entrance supported on four heavy Doric columns. The plan shows a long, straight-sided auditorium with a segmental curve opposite the stage. A row of boxes surrounds the pit just as in the days of Pepys, and we notice proscenium doors in the splayed walls either side the somewhat narrow proscenium opening. The stage has not the usual recess at the back.

In 1815, the house underwent the first of the numerous alterations designed to keep it up to date and maintain that stream of constant

improvement demanded of a manager. These alterations are seen on a plan of 1876, 2, which bears a small slip pasted upon it illustrating a further alteration two years later to the rooms at the back of the stage consequent upon the expiry of the lease of certain ground on which the carpenter's shop had, till then, stood. Concerning the 1815 alterations, the manuscript reads:—

In 1815 alterations, the manuscript reads:

In 1815 the plan of the House was altered, the auditorium being made shorter by taking off a box on each (? side) and running the stage further into the pit.

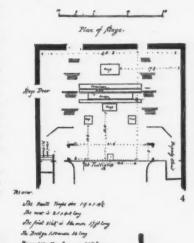
The following from the Journal of that date:

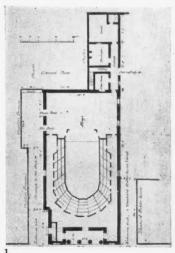
Since the Summer season our Theatre has been greatly improved in consequence of a judicious alteration, more

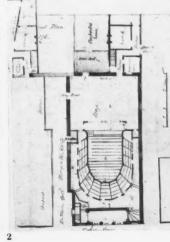
Since the Summer season our Theatre has been greatly improved in consequence of a judicious alteration, more room is gained to Senic (sic) representations and an excellent view of the stage is afforded from every part of the boxes.

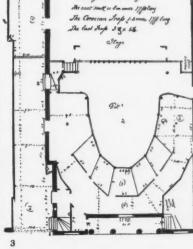
How frequently do we meet in similar journals such cryptic phrases as "in consequence of a judicious alteration" but lack entirely the information to visualize the extent or nature of that alteration. Here Eyre helps us. Close comparison of the two plans supplies most of the story. We note that the stage box on either side was removed entirely and that the front of the next box was returned in a curve, the stage being carried forward to reach it. The manuscript continues:—

The entrance to the pit which was under a portion of the stage, was reversed, so that the public entered by a new doorway near the street, passing under the lower side boxes into the pit.





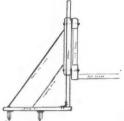




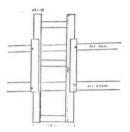
The Theatre Royal at Ipswich exists no longer, but from the fully illustrated manuscript history described by Mr. Southern we can form an exact picture of its vicissitudes between 1803, when it was first rebuilt, and 1887 when it was last re-modelled. The headpiece and 1 show the theatre in 1803, 2 as altered in 1815, 3 as it was in the end, and 4 the stage only, drawn about 1858.



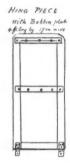
5, section of one of a pair of sockets, attaching up-right part of each groove unit to fly-rail (see 7).



6, side view of complete

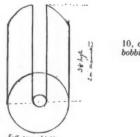


7, front view of upright part of the groove.



8, plan looking up of horizontal hinged piece carrying bobbins.





10, one of the projecting bobbins.

This was a curious subterranean mode of entry involving the descent of "a narrow flight of some 23 steps" and the ascent of "another shorter" 23 steps" and the ascent of "another shorter" flight. It was an arrangement with which Eyre in later years was not satisfied, and which as shall see he improved. But it was at that time some advance on the earlier arrangement whereby the public passed under the corner of the stage to gain the pit.

It should be noted that the old splayed sides of the proscenium are now turned back to a full right angle, so giving a wider opening.

On the back of this plan is a plan of the stage of the period, 4. Here is to be found interesting evidence on the position of the wing grooves (shown by the four groups of short lines either side the stage), and on the hitherto obscure point: why was the front pair of wing grooves, in these why was the front pair of wing grooves, in these early stages, situated so far back from the proseenium? The answer, shown here, is that the interval between front wing and proseenium side was filled with a semi-permanent "booked" proseenium wing—actually in this case of painted crimson drapery—which, since it remained for all scenes, needed no groove to assist it to slide out of sight in a change. The traps (two corner traps of sight in a change. The traps (two corner traps and a grave trap) are shown, and the difference between a narrow "sink" (through which only scenery rose or sank) and the wider "bridge which raised or lowered groups of characters, is seen, and the mysterious "Corsican trap" behind is clearly labelled.

This Corsican trap is of some interest. We read that the stage, in its early days was "fitted with 5 traps, in 1858 the 2 small ones near the back of the stage were made into a 'Corsican Trap,' this was taken out in 1877." It is to be supposed that the original five traps consisted of two small, square, corner traps in the familiar position towards the front of the stage, an oblong, central grave trap behind, and then two more small corner traps at the back. These latter are unusual but it may well be that they mark an old-fashioned arrangement belonging to the eighteenth century in which corner traps were used well up-stage. However that may be, the Corsican trap, put in in 1858 by means of uniting two smaller traps, had a history.

In 1852, Kean presented at the Princess's Theatre an adaptation by Boucieault from the French, entitled *The Corsican Brothers*. In this play (to become one of the most famous of melodramas) a ghost had to rise slowly from the earth, and here was obviously the occasion for a stage trap. But this ghost effect was different from the Not only had the ghost to rise, but as he rose he had to move across the stage. Not only then was a trap needed, but a trap which, as the player ascended, itself moved across the stage, carrying him laterally as it lifted him. So effectively was this problem tackled in the original production (which was marked generally by most impressive staging) that the "Corsican effect" became a necessity for all aspiring theatre managers of the time. From Eyre's notes we see the mechanism of the effect: under an opening 17 ft. long and 14½ in. wide, a small 2 ft. platform ran on a sloping rail. On this the player stood, entirely hidden under the stage at the beginning of its travel. of its travel. As it was drawn across, it rose on its rails until, when it reached the far side of the stage, the "ghost" was fully in view. Attached to either side of the trap-opening so as to move with it were two lengths of jointed flooring which slid along the aperture, covering the gap except where the trap happened to be at a given moment. Furthermore, the circular opening of the trap itself was lined with a fringe of bristles which pressed against the figure as it rose and so prevented any aperture being visible between the player's body and the stage through which it was passing.

These carpenters indeed knew their technique. But the Corsican trap was a passing craze. At Ipswich, by 1877, it was done with, and its mechan-

ism removed from the stage cellar.

The "grooves" of this particular theatre were of a highly interesting pattern, quite distinct from the type discovered at the Theatre Royal, Bristol, and described in these pages two years ago (May, 1944). They are clearly illustrated in diagrams in the manuscript, 5 to 10. We see that

each set consisted of a vertical frame sliding up and down in sockets attached to the face of the fly-rail, with a hinged horizontal member at the bottom maintained by a supporting chain. Both of these members have unusual qualities. former we see the variability in height by which the grooves could be adapted to take sets of wings of different lengths on different occasions—a valuable property in a provincial theatre. And in the latter we note that the wing-tops were supported, interestingly enough, not in actual grooves as was the usual way, but between downward-projecting pairs of prongs each furnished with a revolving bobbin to facilitate the sliding on or off of the scene. Provision is made for four wings at each groove-position, hence the four short lines in each groove-group on the stage plan. The pairs of longer lines behind these are separate grooves for the use of "flats" or back scenes.

A highly interesting and unusual piece of information is to be found concerning the working of the wings in the earlier period of this theatre. We read that the original wings were what are here called "book wings," and did not run in grooves at all. The manuscript tells us:—

Il. The manuscript tells us:—

The "book wings" had four on each barrel. "Palace interior," "Wood," "Cottage Interior," & "Cave or Rock." These remained in use til 1857 when they were converted into the modern style, by Guyton, Mr. Gill's Carpenter, who added 12 inches in height. The book wings were worked by means of a spindle passing through the stage at the end was a grooved wheel around which passed a rope connected with another wheel situated on the prompt side of the stage, so when a scene required changing a man had only to turn the wheel changing the entire number at once.

The "modern style" mentioned above is, of ourse, the groove system already illustrated.

course, the groove system already illustrated.

The shifting of scenery exercised further effect on the structure of the house some twenty years later, as we shall see in a moment. Returning now to the story of the auditorium we find that an innovation was made upon the old benches,

In 1877 The boxes and pit were reseated with backed seats and an amphitheatre made in front part of the gallery. During 1883 The gallery was reseated & brought out 18 inches over the upper boxes, the floor of the back part of the gallery being raised 2 ft. giving a better rake to the seats. The passage to the pit being also paved with stone. Iron gates to fold back behind the pillars were put in, in place of the old wooden ones between the portico pillars in front of the house.

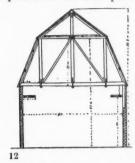
Then in 1887 comes a considerable change

Then in 1887 comes a considerable change affecting the arrangement of the old Georgian system of boxes encircling the pit-a custom which in the London theatres had fifty years before begun to be abandoned for our wider pit and raised circles. In this case a compromise was made, 3: the side boxes were entirely redesigned, those nearest the stage being removed, and the rest losing their separating partitions. The five front boxes at the end of the house remained the same.



11, roundel from the ceiling of 1872, taken literally from a silver table-top of Elkington's, 16 is an actual fragment of the ceiling, 17 and 18 also actual fragments preserved in the manuscript. They come from the interior as it was in 1882, when the scene painter Burgess painted it in the perspective 14.

1887 had seen the serious catastrophe at Exeter theatre where many people were trapped in a fire which gutted the house, and especial attention was therefore being paid at the time to adequacy of exits. Eyre had entirely replanned his house from this point of view, as may be seen by a comparison of the 1887 plan with that of 1876.

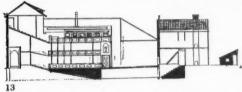


Section of the mansard roof added to the stage in 1888 to give "flying"

Notice how the tortuous death-trap of the pit passage is avoided, the entrance now being direct from the door by a couple of steps.

The manuscript contains three representations of the auditorium before and after these modifications, the first a water-colour made in 1882, 14, the second a tinted elevation of the box fronts in 1889 (after the alteration), and the third the beforementioned photograph, 15, which, though faded, offers, together with the drawings, as interesting a witness as one could possibly have of the struggle of a small provincial playhouse to keep abreast of the times and adapt its early-Regency plan to the style of the auditorium of the Victorian

A further move to come up to date was made with the introduction of a fly-loft in 1888. Some steps had been taken in this direction already.



Longitudinal section of the theatre before the stage roof was heightened.

We read that-

Ve read that—
Until 1876 the stage did not have properly constructed
"flies," but in this year they were put in by a stage
carpenter from the Adelphi Theatre London who also
put in "gas Battens" with colored "mediums" for
moonlight and other effects.

The ceiling of roof over the stage having got into a very
bad and insecure state in 1883 it was lined with fireproof canvas. The large beams which were over the stage
running from proscenium to back wall to support this
gave a little addition to the height of the scenes and the
next year two other large beams were taken out and the
roof supported by pillars on each side this gave 3 ft.
more to the scenes and enabled the "borders" to be
drawn up higher.

There follows a diagram of the system of roof timbers at that time, which also contains an indication of the drum and shaft used to raise and lower cloud machines and the like.

Cross-sectional drawings illustrate the relation of roof and house at this period, and show the cramped over-stage space, 12. The above altera-



The auditorium in 1882. From a water colour by W. Burgess, resident scene painter.

tions proved inadequate to correct this fault and in 1888 a much more drastic step was taken towards modernization:

The roof was taken off, the walls carried up 10 ft. higher and a high pitched "mansard" roof instead of the old "hip" form put on which with the new "flies," and "grid" floor made the stage one of the best in the provinces the scenes being made 16 ft. high.

A side elevation and a sketch, 22, show the ewform and diagrams give the structure of the

new form, and diagrams give the structure of the new roof and of the fly-floor suspended from it, 13.

But here, alas, our story closes abruptly. All these developments were but compromises. They embodied the trend of new movements, but were not in themselves bold enough to cut with the old entirely. They did not bring the house sufficiently

up to date, and in 1890 the curtain fell.

There remains, however, much that is interesting in the manuscript, especially in the wealth of studies made of the alterations—some of them oddly, and even pathetically, eloquent of their period—made to the interior decorations in the

passing years.

The scheme seen in the photograph of 1889 was



Photograph of 1889, showing the last showing the last stage before the end of the theatre.







an old one; we see the same thing in the drawing of 1882, and we find indication in the manuscript that this particular ceiling was done (by Wm. the resident scene-painter-obviously the properest man always to decorate his own theatre!) in 1881. Various sketches for this scheme exist in the manuscript. As for the box fronts, we find with great interest that Eyre appears to have taken down at least two of the actual paintings themselves at the resignation of the house and preserved them for us. They are executed in distemper upon paper, which was stuck to the panels of the box fronts. The manuscript presents for our inspection a roundel from the set of cupids, 18, and a tattered specimen, folded in four, but still preserving incontestible evidence of flourishingly accomplished brushwork, of the amorini and scrolled foliage which, with the roundels, graced alternate boxes, 17. The colour of the roundels is a grey monochrome, and of the floriate panels, a rich green and brown leaf on a deep cream ground with purple cast shadows, the figure being a rich, warm and very deep

But we have evidence of an earlier ceiling, one executed by the same painter in 1872, and recorded by Eyre as the fifth scheme in the building's history. This was an elaborate circle of flying, classical figures, based on a silver repoussé tabletop by Elkington's, an engraving of which was published in the *Illustrated London News*, of August 1, 1862, and which, artlessly enough, Eyre stuck into his record, 11. Of this decoration again two actual fragments are preserved in the form of coy female heads, 16. And notes of the four earlier ceiling-decorations are also to be found. The box fronts are well studied too. Previous to the amorini of Burgess, an earlier scene painter named Thorne had, in 1823, achieved a pleasant scheme for them in similar foliated scroll-work. Again, Thorne had previously, in 1815, designed a scheme with Regency flower-bunches of some delicacy, encircled in an oval frame. Fragments and notes of all these and of earlier schemes are

preserved, and space alone forbids our study of the others.

Let us, however, not forget to add that at a period dated 1855, under the management of a Mr. Gill, parts of the theatre were papered with wallpaper of which scraps are preserved here and there in the manuscript—indeed on one page is stuck an envelope containing several of these scraps from different periods, all dated on the back. Among these is a fine specimen of true flock paper, where in the intervals of foliation, portions of the design were covered with size and the fragments of wool-combings blown on while it was wet, so producing passages almost exactly like appliqué velvet.

There remain the scenes and curtains. Here again may be found points of new information. For instance, the original curtain we find was of the traditional green baize. It was replaced once, and again in 1873. The latter curtain remained till 1880, when it suffered an accident:—

once, and again in 1873. The latter curtain remained till 1880, when it suffered an accident:

During the very cold winter of that year, some rats formed their nests in it, while rolled up, and so destroyed and mutilated it, that the proprietors decided in order to prevent a recurrence of the damage, to have instead of a baize, a painted drop. This was done by William Burgess the resident Artist during Feby 1881. It was painted in imitation of crimson drapery & gold fringe and white satin hangings with lace trimmings. These are parted and a representation of Roubillac's celebrated statue of Shakespear is seen between them. This when the theatre was sold in 1890 was sent to London.

The act drops, as we read later, were quite separate from the curtain and were frequently replaced. Some notes on these are given.

Among the scenes reproduced are pleasant Victorian examples of a Front Chamber, 19, a Drapery Wing, a Cut Wood with its Backing, 20, and a pair of Prison flats, 21, all of about 1890. There is further a note on the stock scenes; we read—

These did duty for any ordinary pieces, Being "Palace" arch & backing. A "two door Flat." A "Cottage Flat." "Front Wood," "Front Chamber" and "Front Street," these three were "drops" and hung in the front "entrances." The "back wood," "back street" and "horizon" (all drops) against the back of the stage. In the centre were the "cut wood" and its "backing" and two "cave" pieces. These drops were 12 ft. wide and about 14 high.

Many other scraps of information are scattered through this work—the replacement of tallow candles by wax in 1787, the supersession of these by oil lamps, and of those again by gas in 1839. Again the fact that the scene painter was the best paid man of the company "receiving two pounds

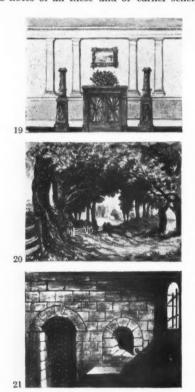
& 5/- for lodgings per week and also his coach hire."

But these are as trimmings to the main theme. The great value of the manuscript to us is the unrivalled record it gives of the architectural strainings and fumblings of a playhouse born at an unfortunate date and descended from an old-fashioned parent. 1803 was, in a sense, the most ill-starred year to build any theatre that hoped for a long or settled history. It was one of the last years (from the point of view of auditorium design) of the great Georgian period, the period which followed the experimental essays of the short Restoration era, and which first saw the British playhouse settle into an accepted form.

Of this form, the theatre at Bristol (1766) and that at Richmond, Yorkshire (1788) are late but pure examples. The Sans Pareil and the Coburg, on the other hand, were two London theatres of a new form, belonging to the first twenty years of the nineteenth century. They show that in the interval a revolution had begun, bringing a new form of auditorium which was to become the standard lay-out until the eve of to-day.

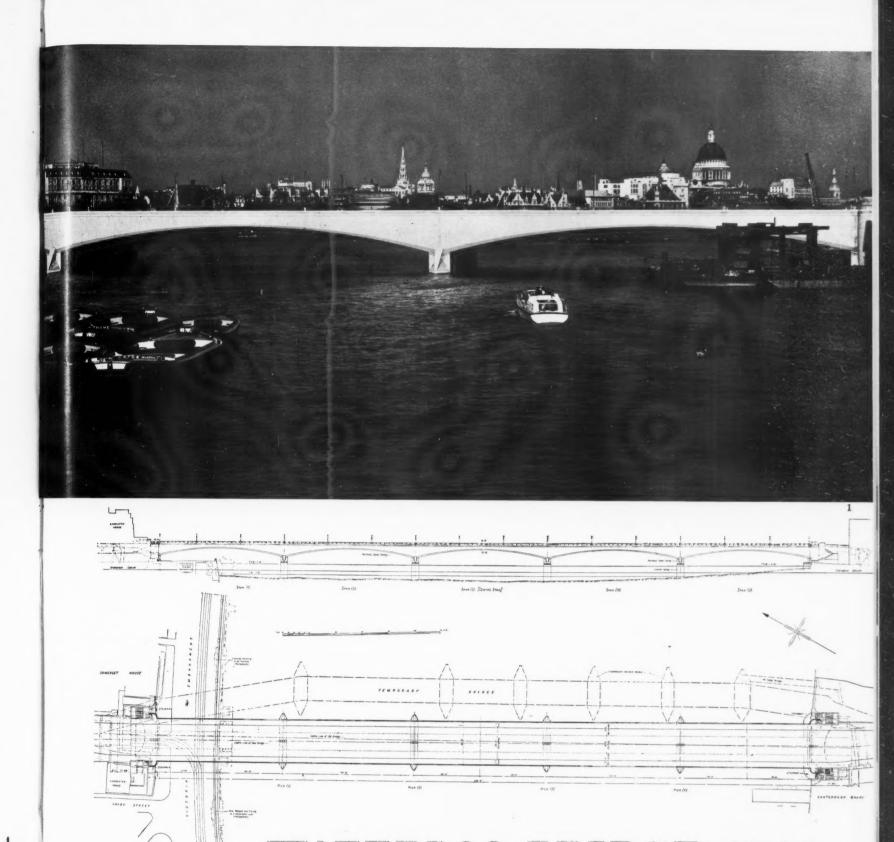
But the Ipswich theatre of 1803 fell between these two periods. It sprang when the Georgian pit and boxes were still lingering, but no sooner had it begun its career than they had gone and the new auditorium with open pit and raised circles was the vogue. It was, therefore, out of its times —a young theatre, but an old-fashioned one. More ambitious forms of scenery and scene-handling were beginning to strain its almost-eighteenth-century arrangement, new houses were springing up, even in the provinces, with auditories of a fresh design. For close on ninety years this Georgian playhouse tried to cope with its Regency, and later its Victorian, world. But it was born old. Its alterations were but patchwork; they could not turn the favour of the theatre into the new lineaments. And in the end it passed away.

But its careful recorder has left us a document unique not only in its extent, but also in the less obvious quality that it is a witness superbly illustrating how the Georgian auditorium was superseded by the Regency, and, in spite of its date, in spite of its alteration, this little house remained to the end what at heart it really was—a Georgian building, but one that came too late. It tried to become Regency but failed. But in its attempt it left us a lesson in a transition phase of the history of the English auditorium that perhaps will never be bettered.



Three of the scenes used in the last years of the theatre: 19, a front chamber; 20, a wood; 21, a prison.

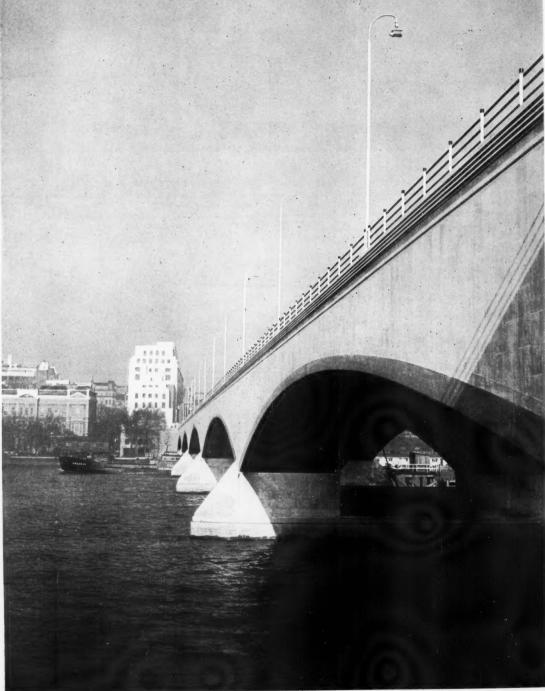




ENGINEERS: RENDEL, PALMER & TRITTON, in association with SIR PEIRSON FRANK. RESIDENT ENGINEER: H. F. NOLANS. ARCHITECT: SIR GILES GILBERT SCOTT

GENERAL: it is not an overstatement to say that the new Waterloo Bridge is, so far, the twentieth century's most notable contribution to the London scene. No further proof is needed than the panorama shown in 1 above, although from nearly every other viewpoint its immense flat arches, surmounted by the continuous horizontal coping, possess the same dynamic equilibrium, and link far less illustrious buildings no less successfully. The foil this bridge provides to the superb accidental effects in which London is so rich, is a hint of possible future triumphs in reconstruction. The foundation stone of the new bridge was laid on May 4, 1939. It affords much better road and navigation facilities than the old. The comparative dimensions are as follows:—





In 1923 a settlement was observed in the pier on the Lambeth side of the centre arch of Rennie's Waterloo Bridge. The London County Council was advised that the effective life of the foundations was coming to an end. Remedial measures were taken in the hope that settlement might be arrested. However, the condition rapidly deteriorated and the bridge was closed to traffic on May 11, 1924. In spite of strong protests and expert proposals for the retention of the old bridge by such bodies as the Royal Academy, the Royal Institute of British Architects and the Society for the Preservation of Ancient Buildings, all strongly supported by this Review, in 1934 the Council decided to demolish the old bridge and construct a new one in its place. Much as we may continue to regret the old bridge, these facts only serve to emphasize how complete has been the triumph of Sir Giles Gilbert Scott and the engineers in achieving a bridge with such striking qualities of its own.



Waterloo Bridge		New	Old	
Number of spans Clear width of spans	Ab	5 About 240ft.	9 120ft.	
Headroom above Trinity Water	High	30ft.	26ft. 8in.	
Width between parapets		80ft.	42ft. 6in.	
Width of carriageway Width of each footway		58ft. 11ft.	27ft. 6in. 7ft. 6in.	

CONSTRUCTION: the bridge consists of girders, continuous over spans 1 and 2 and 4 and 5, with a suspended section, 94 feet long, carried by cantilevers in the centre of span 3. At the landwards ends short cantilevers extend towards the approaches. To give the maximum headroom for navigation the depth of the members of the superstructure was kept as small as possible. This was achieved by adopting a highly scientific design and a very high standard of workmanship. The bridge piers are founded in hard London clay at a depth of about 35 feet below Ordnance Datum, or about 20 feet below the river bed at the deepest point. This allows for future dredging to deepen the navigation channel. The foundations are of solid concrete, 117 feet long by 27 feet wide and 6 feet deep. The piers are of reinforced concrete, with a facing of Portland stone except between high and low water levels, where they are faced with Cornish granite taken from the old bridge. The spans are carried on bearing walls 83 feet long and 2 feet 3 inches thick, which pass down the centre of the piers and are rigidly connected to the foundation. The spans merge into these bearing walls without any intervening rollers or other form of joint. The piers that



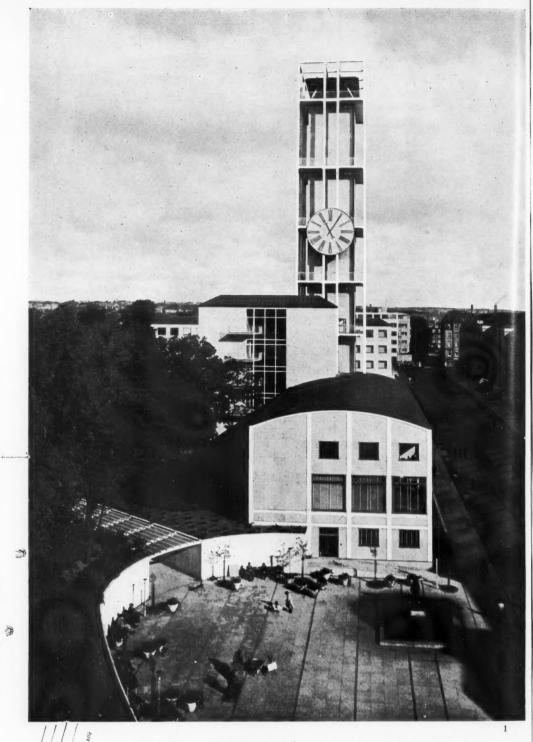




are visible are shells, 106 feet long by 14 feet wide, surrounding the bearing walls and protecting them against damage by shipping. They also limit the movement of the bearing walls by means of stops. The bearing walls are flexible, and are equivalent to articulated supports. Means of controlling the horizontal movement of the bridge are provided by substantial stops at each end of the bridge and by the subsidiary stops at the tops of the shells encasing the piers. Changes of length due to temperature are taken care of at expansion joints at the ends of the bridge and at the suspended part of the centre span. These joints are indicated in the road surface by sliding plates and allow for a change in length, between winter and summer, of 5½ inches.

length due to temperature are taken care of at expansion joints at the ends of the bridge and at the suspended part of the centre span. These joints are indicated in the road surface by sliding plates and allow for a change in length, between winter and summer, of 5½ inches. HANDRAILS AND LAMP STANDARDS: it is stated that the present temporary handrails and lamp standards will be replaced, when conditions permit, by new ones in keeping with the structure. Although the existing handrails and lamp standards show all the disadvantages in detail of temporary materials and workmanship, their general effect in relation to the design of the bridge could hardly be improved upon, and it is to be hoped that the new designs will retain this simplicity, while translating it into more suitable materials and more lasting workmanship.





Ikke nedlagt Kirkegaard

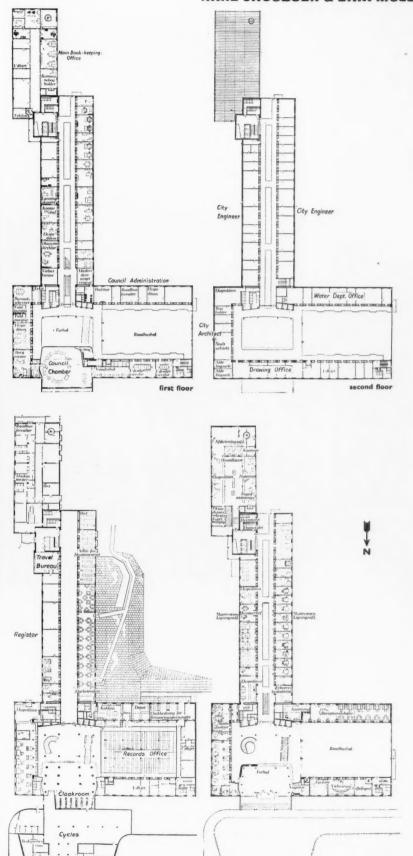
### TOWN HALL AT AARHUS

GENERAL: before 1850 the town of Aarhus had a population of about 8,000, and it was at that time the fourth largest in Denmark. Development in the last half of the nineteenth century increased the population enormously—in 1870 the total was 15,000, in 1915 over 60,000, and to-day it exceeds 100,000. In 1857 the old hall was pulled down and the city council moved into a new building which was designed by C. A. F. Thielman (1803-1863). He was a pupil of C. S. Hansen who broke away from the classical style and introduced what has now become known as the Gothic Revival. From 1870-1915 the population of Aarhus quadrupled and the city's expenditure increased thirty-four times so that the administration was forced to find larger premises. In 1936 the question of a new and larger town hall was raised, and designs were invited for competition. In November 1937 the city council selected the plan of Arne Jacobsen and Erik Möller. The town hall was officially opened on July 2, 1941, although not completely finished.

PLANNING: the building is divided into three sections, (1) the Hall and Council Chamber; (2) a wing housing general offices; (3) another wing with the tower and the larger administration offices, including the City Treasurer's office and Tax Department.

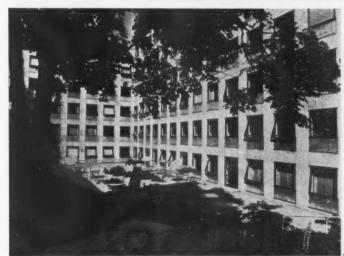
1, the town hall from the south. 2, the main entrance. 3, from the west. 4, the sunk garden on the west side. 5, looking towards the window lighting the office access galleries.

#### ARNE JACOBSEN & ERIK MOLLER





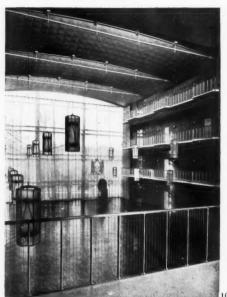








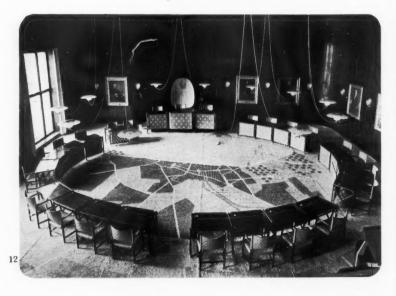
6. access galleries in the office-wing. 7, galleries in the main office wing. 8, the main entrance hall with the staircase, and 9, the entrance hall showing the benches and drinking fountain. 10, the big council hall which can be used for dances and exhibitions. 11, the marriage registry, the flower décor on the walls is by Albert Naur. 12, the council chamber seen from the balcony. The walls are faced with Cuban mahogany, the chairs are covered with pigskin and the carpet is woven with a plan of the town of Aarhus.





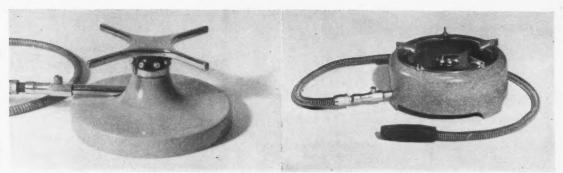
CONSTRUCTION: the building is of reinforced concrete; the outside walls and the floors are constructed to take their share of the load, but the main internal load-bearing walls are of reinforced concrete skeleton construction designed to accommodate the central heating and air conditioning ducts The building is divided into bays of approximately 10ft. 6in. The internal walls have openings which can be used either as doors or cupboards, the frames being of steel and inter-

FINISHES: the building is faced with marble from Porsgrunn, Norway, and the balconies and columns are of white roughcast cement with fine aggregate finish. The castings are made in wooden moulds, and after setting the surface is ground with carborundum stone. The roof is of copper, and the office windows are pivot-opening side-hung with sills of Oregon pine and frames of teak. The walls are panelled with beech and the ceiling decoration is designed to give the best acoustic properties. In the office wings the walls are covered with furnishing fabric and with beech veneer between the reinforced concrete pillars. All office floors are oak parquet and in the corridors and two of the larger offices the floors are made of magnesium mixed with asbestos fibre. Heating is provided by low pressure steam from the Municipal Electricity Supply Station. Radiators are placed under the windows. In the corridors radiant heating is supplied from pipes running round the balconies and along the floors.



50

#### gas rings



155, 156 Boiling rings incorporating a new design of non-aerated burners (Friedman-Athill).

## The plcte rack folds under the white enamelled lid. The oven door is hinged at the bottom and when open forms a shelf.

## DESIGN REVIEW

for a discussion of new designs, new materials and new processes, with a view to developing the essential visual qualities of our age t functional soundness, the outcome of science, and free esthetic fancy, the outcome of imagination.

#### Advisory Committee

Misha Black Noel Carrington John Gloag Nikolaus Pevsner Peter Ray Herbert Read Sadie Speight

A recent P.E.P. report estimates that the number of gas cookers alone which will be needed in this country during the next ten years will be some 850,000 annually. If the comparable demand for space heating, water heating and refrigeration is added, the immensity of the supply problem facing the gas industry becomes apparent.

With notartial calcarded this calibratic states are supplied to the supply problem.

With potential sales of this calibre the primary concern of gas equipment manufacturers is to increase output with the greatest rapidity; their home markets are assured for many years to come. It is, therefore, the more satisfactory that so many manufacturers, instead of being content to reproduce their pre-war patterns, should be concerning themselves with technical and visual refinements and are already marketing appliances which show considerable improvements on pre-war models.

That much still remains to be done, few people in the gas industry would dispute, but the improvements made since the London Gas Light and Coke Company was given statutory powers in 1812 to make "inflammable air" seem likely to be greatly accelerated during the next few years. The general trend of these developments can very briefly be summarised as follows:—

Cooking: solid and semi-solid hotplates are being incorporated for easier cleaning and improved appearance. New and more efficient burners (especially of a non-aerated type) are being developed. Other problems concerning designers are reduction of maintenance, the provision of lower simmering rates, and more even and efficient grilling. Considerable progress has been made in the standardization of overall dimensions and thermostat settings, and horizontal and eye-level types of cookers are increasing the ease of oven use where available wall space is not unduly restricted. It is hoped that finned base kettles will also soon be more generally available further to reduce the cost and increase the speed of boiling water.

Space heating: some of the new models incorporate non-aerated silent burners and more sturdy radiants. The combination of convected and radiant heat is a feature of some designs and flueing developments make it possible to provide background heating to landings and bedrooms on the upper floors from fires in the living room. The use of coke fires is recommended for heating the main living room and gas ignited open coke fires already able to burn for 6 to 7 hours without re-fuelling are being developed for over-night burning: this is, of course, now already possible by the use of an openable slow-combustion stove.

Water heating: experiments are proceeding in combining the circulator and sink heater into one appliance. The development of an improved type of divided storage vessel for storage heaters will facilitate the more speedy and economic drawing off of small quantities of hot water. Gas and coke boilers and gas and coke back-boilers are also being developed so that one appliance can give a satisfactory hot water service with either or both fuels.

Laundry: drying cupboards can dry a full load of clothes to ironing stage in less than an hour. The heated sink which can be used as a normal sink when not required for washing clothes is a useful new addition to home laundry facilities where space is restricted. Some of the new gas washing machines incorporate electrically operated agitators and wringers, thus combining the use of both fuels to their maximum efficiency.

Refrigeration: the most recent developments have resulted in lower capital and lower maintenance costs than before the war. The design of the new built-in 1.5 cu. ft. refrigerator is perhaps rather unduly "streamlined" with its excessively large name-plate, and it will be interesting to see how much American design idiom has been allowed to affect the design of the new higher capacity models.

It is to be hoped that during the next few years a greater rationalization of the gas appliance manufacturing industry will be effected and a reduction made in the excessive number of different types of appliances produced before the war. Only if this is done will it be possible to gain the benefits of improved efficiency and design while the mass production of a fewer number of patterns enables costs to be kept down.

In considering the cost of appliances, however, the vital aspect of efficiency should be related to the initial expenditure. It has been estimated that the cost of fuel in an average small house equals, in 30 years, the initial cost of the building itself. Over the past 100 years gas appliances have been steadily increasing in efficiency; during the period 1926-1936 for example increased appliance efficiency was equal to an average reduction of 2d. per therm in the price of gas—this trend seems likely to be maintained.



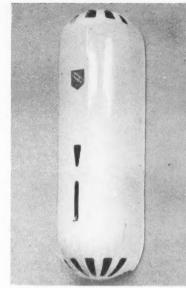
158 Designed for large private houses or small boarding houses, the raised oven allows for easy cleaning underneath (Radiation).



159 The easily cleaned hosplate of a gas cooker. Other designs now provide a more level surface in vitreous enamelled steel. (Radiation).



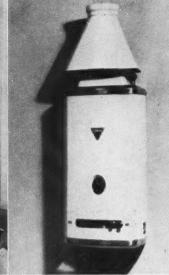
#### water heaters



160 A new sink multipoint water heater. (Ranalah).



Sink water heater able to provide instantaneous boiling water. (Ascot Gas Water Heaters).



162 Instantaneous water heater able to deliver 3½ gallons per minute to any of several points. (Ascot Gas Water Heaters).



163 The water heater is built into the wall saving the cost of the vitreous enamelled casing. The cooker oven is raised level with the hotplate and provides a continuous working surface.

#### fires



The Fulham Grate burns all types of fuel (coke or coal). The damper provides easy adjustment of burning speed and enables the fire to be kept burning for 6-7 hours without refuelling.



166 The "Lancelot" Fire by Bratt Colbran.



167 A panel type gas fire with the new radiants and non-aerated burners. (Radiation).



A new gas fire incorporating the almost unbreakable radiants and silent non-aerated burners. ("Silent Beam" by Radiation).



169 Hearth type gas fire incorporating convected with radiated heat. (General Gas Appliances).



convectors



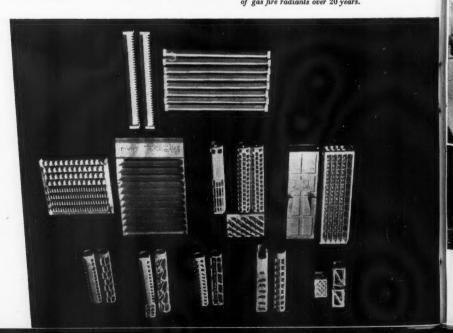
for factory use. (Bratt Colbran). A gas background heater compared with a loop radiation with the same performance, on the left. (S. Flavell & Co.).



meters and radiants

Left, the development of gas meters over 50 years.

The capacity of these four meters is identical. Below, the development of gas fire radiants over 20 years.



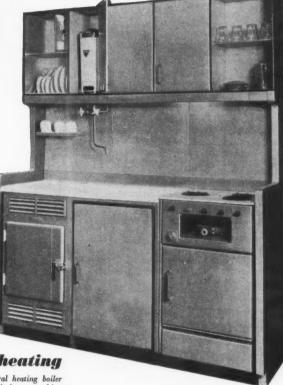


A small storage single point water heater. (Richmond's Gas Stove Co.).





Gas central heating boiler which eliminates stoking and coke storage. (Ideal Boilers and Radiation).



package kitchen

A complete minimum kitchen unit 5 ft. 6 in. long by 6 ft. 9 in. high by 1 ft. 9 in. deep.



#### ranges

Gas ranges, fish fryers, grills, etc., to serve 1,500-2,000 meals a day. (Benham & Sons).

176 The burners of a gas restaurant cookerrange which reproduces the hot fire-bed of the solid fuel range. The temperature of the large level hotplate varies from the burner area to the perimeter. (Benham & Sons).

### B 0 0 K S

#### Safety in Numbers

A PRIMER OF PROPORTION IN THE ARTS OF FORM AND MUSIC. By R. W. Gardner. New York, William Helburn, 1945.

A STUDY of proportion is not part of the curriculum of modern architectural education; for we regard a sense of proportion as a gift from heaven which cannot be rationally accounted for or taught. This approach to proportion is so natural to us that we are generally unaware of its relative novelty.

novelty.

From Alberti's day onwards architects never ceased to demonstrate that the proportions of a building had to reflect that universal harmony which Pythagoras had discovered, which was fully embraced in Plato's philosophy and which modern philosophers and scientists from Marsilio Ficino to Shaftesbury and from Kepler to Leibniz and Newton regarded as an essential truth. This harmony, to be perceived in macrocosm and microcosm alike, is absolute and mathematical. It manifests itself most clearly in the consonances of the Greek musical scale-octave, fifth and fourth—which can be measured in space and represent arithmetically the progressive ratios 1:2:3:4. If such simple ratios, expressed in tones, strike our ear as harmonies, it seems obvious that the same ratios, expressed in space, must appear as harmonic proportions to our eye. Proportion, thus based on universally valid laws, was regarded as one of the corner-stones of architectural education right into the eighteenth century. Only during the later part of that century was the structure of classical asthetic broken up, and objective asthetic—by Hume, Burke, Alison and others—turned into subjective sensibility, when the idea of the genius emerged who creates in his own right.

when the idea of the genus emerged who creates in his own right.

With his Primer of Proportion the late R. W. Gardner endeavours to show a way out of the modern chaos in this field, a way leading straight back to pre-eighteenth century conceptions. His starting-point is the old statement that the same laws that occur in music occur also in the science and art of forms. Parallel with the "musical scale" he tries to lay the foundation for what he calls the "area scale," by translating the ratios of the main intervals of the musical scale into terms of Euclidian geometry. This leads him to circles and squares "nested" within each other at spatial intervals corresponding to the intervals of the musical scale. The "area scale" radiates from the centre in concentric arrangement, and all the parts of a design—whether a building, a park, a square, a bridge or even a whole town—have to be harmonically related to the central nucleus. The author is wise enough to emphasize that he regards his "whorl" of circles and squares as no more than a pattern of visual proportions "with which the creative artist has to work as the composer works with the musical scale. Although these hints do no justice to the content of the book, they will suffice to give an idea of its drift.

The American Artists Professional League sponsored the publication of the *Primer* after the author's death. We do not know how successful his teachings have been in America and whether the book will have a tangible influence on the future. But there are reasons working against it. In the last hundred years we have seen too many systems of proportion from which their authors expected salvation. They have all been passed by by the artists. The old universality has irrevocably gone, and Ruskin's conviction that it must be left to the inspiration of the artist to invent beautiful proportions is for better or for worse still our own.

R. WITTKOWER

#### ..........

#### Land and Lucre

DIE STADT UND IHR BODEN. Towns and the Land. By Hans Bernoulli. Verlag für Architektur A.G. Erlenbach-Zürich. 1946.

MR. BERNOULLI goes straight to the centre problem of town planning—the problem of land ownership. He is not afraid of being called a "doctrinaire," the name generally reserved for those who believe that public planning without public ownership is at best a nuisance, at worst a fraud, and always an absurdity. Town planning, in any case, has never produced even half-way adequate results unless it was applied to land owned by the planning authority.

All the good and beautiful things which have been

worked out by the great theorists of Town Planning —by such men as Le Corbusier, Raymond Unwin, Cornelius Gurlitt—they are all utopian, because the land required for their realisation belongs to thousands of private owners. "Would it not be better, sounder, or private owners. "Would it not be better, sounder, more in line with the seriousness of the present situation, if we began at the beginning," asks Mr. Bernoulli in his introduction. For some reason or other most authors avoid this embarrassing question of land ownership, but is it not slightly dishonest to neglect the foundation and to turn at once to the attractive superstructure?

The question of land ownership is as old as the towns themselves. Mr. Bernoulli gives a part of that history, starting with the Middle Ages and dealing particularly with towns planned and founded during the twelfth and thirteenth centuries. At that time the solution was a simple one: the towns arose on the estates of feudal landlords who remained the owners of the land. "The liege lord commissioned a contractor-the locator—to lay out the town. The locator was . . obliged to gather locatarii, i.e., the necessary inhabitants. These never became actual owners of the land; by paying a yearly duty—the canon—they were granted the right to build on a particular plot. . . . to the ideal plan of the time. To this plan every citizen had to adapt his building." (From the English Summary, p. 7-8.)

The results of this simple and suitable arrangement

are shown in a large number of photographs, plans and sketches, skilfully selected and excellently produced. (All the pictures, plans, etc., have English captions and explanations.) These well-planned old towns and villages possess an indescribable charm. But a calamity soon happens which radically alters the picture: the ownership of the land gradually slips out of the public (or feudal) hand and becomes parcelled out among private individuals. From that moment on town planning is all but dead, and Mr. Bernoulli's pictures illustrate the chaos and desolation that ensue. With increasing populations, industrialism and rising money prosperity, land values rise by leaps and bounds, and the land, once in private hands, becomes practically irrecoverable. Even the wealthiest towns cannot repurchase more than a few acres here and there for public purposes—at colossal expense.

Parks and playgrounds for children become extraordinary luxuries and rarities. The "country"—
undeveloped land of a true rural character—recedes ever farther from the sprawling conurbation with its

ribbon development and speculative spread.

In this evil situation, the practical town architect is all but powerless. If he attempts to do anything at all, he must almost cease to be a creative artist and become a negotiator instead; he is forced to spend his time and energy on unending negotiations with property owners whose bargaining position, as a who is ten times as strong as his

is ten times as strong as his.

ruie, is ten times as strong as his.

This is the sad and exasperating story Mr. Bernoulli has to tell. He tells it at perhaps excessive length and not without repetitions; but at least he does tell it straightforwardly—and with excellent pictures. What remedy does he propose?

It is here that Mr. Bernoulli appears to the present reviewer strangely timid. He recommends the following rules:

ing rules :-"The community should never sell any of the land held by it. The community buys private land whenever

The community allows land held by it to be used

"The community allows land held by it to be used for private enterprise by granting building rights."

By such haphazard buying the community is not likely to acquire the ownership over the areas that most require planning. And what about compensation and betterment? The author is obviously very much afraid of any special land tax, which he seems to consider as discriminatory and unjust. The whole question of betterment is left out. Compensation is to be settled from case to case, apparently on a "willing seller and buyer" basis. That in this way the development value of undeveloped land may be paid many times over does not seem to have occurred to Mr. Bernoulli.

It is strange to note that the only problem in this connection that does seem to bother him is the question onnection that does seem to bother him is the question of the rate of interest. Land could be paid for with State bonds, and the ground rent (collected by the State) could be expected to cover the interest payable on the State bonds. But what, he asks, if the rate of interest begins to rise? This possibility is considered as a stumbling block for the removal of which we are invited to embrace Silvio Gerell's over-ingenious and happily out-dated) monetary reform proposals. Suffice it to say that these fears and proposals are completely out of focus. Once the land has been purchased no increase in the rate of interest can involve the State in deficits on its land account. Nor is there any reason why the rate of interest should not continue to fall in accordance with the cheap money system

practised in Great Britain and the United States. No, land nationalisation is not impeded by economic or financial obstacles, as Mr. Bernoulli seems to think. It is a purely political question and should be recognised

This book deserves a hearty welcome because it goes straight to the point. It shows the enormous, all-decisive importance of public ownership of land for town planning. This is a simple truth, but one of those which most people prefer to keep quiet. If Mr. Bernoulli's text states it somewhat clumsily, his pictures make a brilliant-and unanswerable-

E. F. SCHUMACHER

#### **Bristol Housing**

HOUSING ESTATES. By R. Jevons and J. Madge. University of Bristol, 1946. 7s. 6d.

RISTOL needs 30,000 new houses immediately. In a careful review of life in the 37,000 houses built there between the wars, Rosamond Jevons and John Madge have made several important proposals for the guidance of the future programme that have far more than local significance.

They stress in particular that new outlying housing estates should be of sufficient size to contain a varied community and adequate amenities—they put this at 30,000 people. The alternative is to rehouse people near to their old homes. The stultifying effect of vast one-class suburbs of 12 to 20,000 people is graphically described. The authors know that it is unrealistic to attempt to house widely different income groups in the same street, but they suggest that an estate of 30,000 people could contain groups of very varied incomes, each small group being self-sufficient for immediate day-to-day needs, an important corollary being that the development of estates to suit a variety of income groups would involve the provision of housing accommodation for more single persons, more aged persons and more young childless

couples.

Having got a sufficiently varied grouping of housing types, the next essential is to provide, from the very start, sufficient, but not grandiose, social amenities. They stress the value of a social centre of quite modest size, with halls and committee rooms that can be let to clubs, societies and sports organisations, rather than a full-blown community centre with a staff of social workers and club leaders. "If a tenants' association on a new estate does not throw up its own association of a new estate does not throw up its own leaders, but instead has leaders thrust upon it, the spirit of self-government dies out:" a suitably trained Housing Manager can perform a more valuable service to the residents than a Warden of a Social

They consider that consistent development at 12 houses to the acre was one of the worst features of the inter-war housing estates, as it prevented any compact central core of development. Almost a third of the population of Bristol lived either in "digs" or alone or lodged with relations. A large proportion of these would much prefer to live in small self-contained flats, and similar sort of accommodation was badly needed both for the aged and newly married couples. Further, the adoption of multi-storey develop-ment provides a useful focus for the grouping of shops, cinemas and pubs, which can usually be accommodated within the same general design.

Much useful information and a number of well considered ideas are included in this book, which should serve to discourage other towns than Bristol from repeating the mistakes of the inter-war housing

J. TYRWHITT

#### Art Lies Bleeding

THE VISUAL ARTS. Report of the Arts Inquiry. P by P.E.P. from the Oxford University Press. 10s. 6d. Published

THE General Election of 1945 left people wondering, optimistically or otherwise, about the impact of the new political order on the arts. Those who looked no further than Scandinavia for their clues were encouraged to hope for steady improvement through increased State patronage; those who looked beyond, further east, were not so sure—bureaucratic art has little to commend it. The sickness of the visual arts in Britain has been obvious enough for a long time, and this clinical examination by the Arts Inquiry (sponsored by the Darlington Trustees) confirms the worst fears. The catalogue of ills seems endless. In painting and sculpture malnutrition is acute and a considerable extension of official patronage is needed to put matters right. It is estimated that not more than seven hundred painters and thirty sculptors manage to earn a living to-day by their art. Private patronage has declined very sharply since 1918, and may well decline further with every move towards equality of incomes. But the real demand for art is much greater than the effective demand which is

limited by poor publicity and a weak selling organisanimited by poor publicity and a weak selling organisa-tion. An energetic exhibitions policy and reform in the administration of art galleries would stimulate private patronage and patch up the economics of art until the new educational programme declares its

Design in industry is in an equally woeful condition and here Government intervention can be much more direct. The State can set a good example through direct. The State can set a good example through its own purchases, overhaul the system of art school training, hold exhibitions and assist each industry to make the most of the design resources available. The report's proposals, which were drafted at the end of 1944, were based on an administrative triangle formed by the Ministry of Education and two new bodies, an Arts Council and a Design Council. Since then the Government has set up the Council of Industrial Design and C.E.M.A. has been reconstituted as the Arts Council of Great Britain. The framework of the reconstruction programme is therefore already of the reconstruction programme is therefore already in existence.

A.B.H.

#### SHORTER NOTICES

ENGLAND AND THE MEDITERRANEAN TRADITION.
Studies in Art, History and Literature. Edited by the Warburg and Courtauld Institutes. Oxford University Press, burg and Co

So this is what the Warburg and Courtauld Institutes are doing at last to make a wider public than the few thousands (if that) who take the Journal of the Warburg and Courtauld Institutes know something of the splendid work they are doing. THE ARCHITECTURAL REVIEW has more than once tried to draw attention to the exhibitions and whotographic discoveries of the Warburg Institute.

work they are doing. The Architectural Review has more than once tried to draw attention to the exhibitions and photographic discoveries of the Warburg Institute, youngest member of the University of London, though of a distinguished Continental past.

Is it connected with this Continental past of self-contained scholarship that the Warburg Institute itself has so consistently declined all publicity, even where such publicity would have helped it to obtain the public reputation needed to obtain the funds needed to carry on and expand its activities? Or is it not lack of funds that still withholds the long promised Atlas of Renaissance Iconography, the testament as it were of the Institute's founder, the late Professor Aby Warburg? And is it not lack of funds that holds up the Atlas of Anglo-Mediterranean\*relations which should go with the present book and be a permanent collection of what material was placed on show in the memorable exhibition of a few years ago? And if it is not lack of funds, what is it?

The volume now brought out by the Oxford Press consists of re-prints of articles in the Journal. They range from the Paths will be comediated as the second of the present is ordered include as the second of the pour and include as the public as the property of the pour and include as the property of the pour and include as the pour and include as the property of the pour and include as the property of the prop

The volume now brought out by the Oxford Press consists of re-prints of articles in the Journal. They range from the Ruthwell Cross to William Blake and include some on history and philosophy, and three on architecture: Margaret Whinney's on some church plans by Inigo Jones's pupil John Webb, Dr. Wittkower's on the Palladian or Venetian window in England and some other motifs usually but not correctly called Palladian, and Frank Clark's on Picturesque landscape gardening in England in the eighteenth century, an article closely connected with Mr. Clark's papers on Chiswick and the Gardenesque in The Architectural Review.

Chiswick and the Gardenesque in The Architectural Review.

The standard of scholarship is of the highest throughout the book. Everywhere severe accuracy is combined with a broad and intelligent vision of the really significant historic trends. The results are illuminating far beyond the immediate, limited scope of each article, and a most wholesome antidote against the insularity of so much art criticism in this country.

MAPS FOR THE NATIONAL PLAN. A background to the Barlow Report; the Scott Report; the Beveridge Report. Prepared by the Association for Planning and Regional Reconstruction. Lund Humphries & Co. 15s.

This very intelligently presented folio of maps, now in its second edition, is an invaluable contribution to the information upon which planners depend, whether at the local, regional or national levels. With passages selected from the regional or national levels. With passages selected from the Barlow, Scott and Beveridge reports, a picture is gradually built up of Britain's weather, towns, government, population, industries, power production and distribution, employment, transport, land and agriculture, living conditions, health, education and amenities.

In nearly every case the information is extremely clearly presented; only in the map showing Central Government Boundaries, partly because of the necessary reduction and partly because of the complexity of the present arrangements does the nicture tokas contains and partly because of the complexity of the present arrangements does the nicture tokas contains and arrangements does the nicture tokas contains are accounted. ments, does the picture take a certain amount of unravelling. The layout and typography are excellently suited to the purpose the book is designed to serve.

PLANNING AND RECONSTRUCTION. 1946. Advisory Editor, F. J. Osborn. Todd Publishing Co. 21s.

Editor, F. J. Osborn. Todd Publishing Co. 21s.

The fourth edition of this yearly planning compendium is much expanded. It gives a survey of the latest planning developments in technique, policy and legislation under section one, which suffers from a lack of discrimination in choice and continuity in assembly. However, the directories of official and unofficial planning bodies with chosen statements made by them, under sections three, four, five and nine, are invaluable as is the information given in the remaining seven sections which includes: officially appointed committees and reports, area and city replanning, Regional Planning Authorities, advice on careers in professions associated with planning, statistics and tables, books, periodicals and films, and a who's who.

## Capitalism in the East-End

It was a neighbourhood with a flavour distinct from that of the districts about it. the flat rows of six-roomed cottages, characterless all, stretched everywhere, rank behind rank, in masses unbroken except by the busier thoroughfares of shops. Here each little house asserted its individuality by diversity of paint as much as by diversity of shape. It was, indeed, the last stronghold of the shipwrights and mastmakers, fallen from their high estate since the invasion of iron ships and northern competition. In fact, Shipwrights' Row was the name of a short rank of cottages close by, with gardens in front, each with its mast and flag complete. In other places, where the back-yards were very small, the flagstaff and stays were apt to take to their use the whole space: the pole rising from the exact centre, and a stay taking its purchase from each extreme corner, so that anybody essaying a circuit must perform it with many sudden obeisances. The little streets had an air of cleanliness all their own, largely due to the fresh paint that embellished whatsoever there was an excuse for painting. Many front-doors were reached by two stone steps, always well whitened; and whether there were steps or not, the flagstones before each threshold were distinguished by a whited semicircle five feet in diameter. Noting this curious fact as he tramped along one such street, Johnny was startled by an angry voice close at his elbow, a voice so very sudden and irate that he jumped aside ere he looked for the source. A red-faced woman knelt within a door.

"Idle young faggit!" she said. "Stompin' yer muddy boots all over my clean step!" And she made so vigorous a grasp at a broom that Johnny went five yards at a gallop.

Now truly there was no step of any sort to the house. And Johnny had but crossed the semicircle because he conceived the footpath to be public property, and because it was narrow. But he learnt, afterwards, that the semicircle was a sacred institution of the place, in as high regard among the women as its fellow-fetish, the flagstaff, was among the men; also that none but grown people—and those of low habits or in drink—dared trespass on it; and that it was always called "the step." He learnt much, too, in the matter of paint. Every male inhabitant of Harbour Lane, Shipwrights' Row, and the neighbouring streets, carried, in his leisure moments, a pipe, a pot of paint, and a brush. He puffed comfortably at the pipe, and stumped about his back (or front) garden with the paint-pot in one hand and the brush in the other, "touchingup" whatever paint would stick to. Rails, posts, water-butts, dust-bins, clothes-posts, all were treated, not because they needed it (for they were scarce dry from the last coat), but because there was the paint, and there was the brush, and there was the leisure; and this was the only way to use all three. So that most things about the gardens took an interesting variety of tints in the run of the year, since it was rarely the case that the same colour was used twice in succession. When all wooden surfaces were covered, it was customary to take a turn at windowsills, rain-water pipes, and the stones or oyster shells that bordered the little flower-beds; and when nothing else was left, then the paint-pot and the brush and the pipe were conveyed to the front, and the front door, which had been green, became royal blue, or flaming salmon; as did the railings, if there were any, and the window frames. Two things alone were not subject to such changes of complexion: the flagstaffs and the brick pavings. For it was a law immutable that the flagstaffs should be speckless white, and the bricks a cheerful vermilion; this last a colour frequently renewed, because of nailed boots, but done in good oil paint, because of wet Everything else took the range of the rainbow, and something beyond; so that it was possible, in those houses where two families lived, to tell at a glance whether the upstairs family were on terms of intimacy or merely of distant civility with the downstairs, by the colours, uniform or diverse, of the sills and the model fences that guarded the flower-pots on them. For the token and sign of friendship in Harbour Lane was the loan or the exchange of paint. It was the proper method of breaking the ice between new acquaintances, and was recognised as such by general sanction. The greeting, "Bit o' blue paint any use to ye?" and the offer of the pot across the back fence, were the Harbour Lane equivalents of a call and cards; and

the newcomer made early haste with an offer of yellow or green paint in return. . . .

But paint was something more than a recreation and an instrument of social amenity. It furnished the colony with an equivalent of high finance, wherein all the operations proper to Money and Credit (as spelt with capital initials) were reflected in Paint. For it was a permanent condition of life in Harbour Lane and thereabouts, that everybody owed everybody else some amount of Paint, and was owed Paint, in his turn, by others. So that a complicated system of

exchange prevailed, in which verbal bills and cheques were drawn. . .

With many such arrangements synchronising, crossing and mixing with each other, and made intricate by differing degrees and manners of debit and credit between Bill and George and Jim and Joe, the unlikely subject of Paint became involved in a mathematical web of exceeding interest, a small image of the Money Market, a sort of chaos by double entry wherein few operators were able to strike a balance at a moment, and most were vaguely uncertain whether their accounts inclined toward an affluence of Paint or toward sheer bankruptcy. An exciting result attained without the aid of capital, and with no serious hurt to anybody.

ARTHUR MORRISON (To London Town, 1899).

#### MARGINALIA

Zoning in New Towns

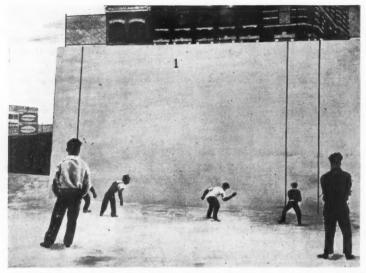
Among Lewis Mumford's activities since he arrived in this country was an address given to the members of the Town Planning Institute in which he advocated, with certain qualifications, the mingling of houses and factories in new towns. A letter from factories in new towns. A letter from Mr. G. Wansbrough, which afterwards Mr. G. Wansbrough, which afterwards appeared in *The Times* supporting this proposal, drew a reply from Professor Holford which, while commending the attitude which refuses to regard industrial areas as necessarily "black spots," put the case for segregation, at least in smaller towns, with some clarity. Pointing out that in a new town of the size proposed for Stevenage the industrial area would be within walking distance of most of the residenwalking distance of most of the residential neighbourhoods, Professor Holford The reasons for zoning a substantial area for factories are simple, and they arise much more from the needs of industry itself than from the rather exaggerated threat to amenity. Factories usually call for flat land, with plenty of room for extension; their structure is less permanent than that of houses, alterations are more frequent, and a tenfold expansion may easily take place in as many years. Industrial roads should be designed and serviced on different lines from residential roads. By-laws, covenants in leases, and other conditions governing such matters as noise, smell, the disposal of refuse and waste, and the area of a site that can be built over cannot fairly be the same for an industrial and a housing estate. Moreover, the organization of transport and other services and exchanges between firms, the use of common canteens and social centres, and the convenience enjoyed by all forms of business when concentrated in a defined area would all to some extent be sacrificed. Finally, it is difficult to see how in practice a number of separate sites could be reserved for factories in a new town when neither their size, their products, nor the nature of their requirements can be foretold."

#### New R.I.B.A. President

L. H. Keay has been elected President of the R.I.B.A. for the Session 1946-47. Mr. Keay, who was born at Eastbourne in 1883, served his articles in the Architectural Department of the City of Norwich, eventually becoming its head. After five years (1916-21) in the Royal Engineers he was appointed Chief Architectural Assistant to the City of Birmingham. From there he went on to Liverpool, becoming Director of Housing and then, in 1938, City Architect as well.

#### Living Communities

An exhibition now on tour in the provinces is that entitled Living Communities, prepared by the National Council of Social Service. This exhibition was on show in London, at the County Hall, in June. The central feature comprises sixteen panels grouped round a model; in London this was supported by material drawn from actual community centres in the London area. The idea behind the exhibition is that the need for community centres is not confined to new housing estates, but is as great in the old established and overcrowded parts of London and other cities. It illustrates how individuals and voluntary organizations can co-operate to form community associations, together with the evolution of the community centre and the various activities connected with it, while there are sections devoted to the help which the statutory authorities can give (including the provision of instructors and premises, as well as grant-aid).





The exhibition of two hundred years of American painting at the Tate Gallery has provided a welcome opportunity for the British public to survey the struggle which it so clearly shows to sever the chains of a ruthless European domination, whilst retaining the close relationship which is natural and, by many American artists, desired. One of the first signs of independence are the anonymous paintings of the early nineteenth century, of which The Buffalo Hunter (left) is one of the best. Above is Ben Shahn's most outstanding work in the exhibition, Handball, painted in 1939.

#### Foreign Office Squalor

The discussion about the necessity of overhauling the Foreign Office has been brought down to a strictly practical level by the writer of a letter to *The Times* who, speaking as "a citizen of a country which is renowned for the homely virtue of cleanliness," suggests that "what is needed is rather a good scrubbing and tidying." After describing the first impression made on foreign visitors by the entrance hall ("dimly lit by a single naked bulb, littered with packing cases, dispatch boxes, and cups of tea"), Mr. J. H. Huizinga gives us a foreigner's-eye-view of one of the reception rooms:

"Its furniture consists of an iron bed

"Its furniture consists of an iron bed in a corner with a few grubby blankets on it, some decrepit desks and chairs, a disorderly pile of books on the mantelpiece and an indescribable litter of papers everywhere. No carpet but plenty of cigarette butts on the dirty floor, no curtains at the windows, nothing but a sickly green distemper on the bare walls. The acoustics in this large high-ceilinged room are such that if two of the full complement of four Foreign Office officials are talking at the same time—not to mention the unceasing din of telephone bells—it is quite impossible for the visitor to concentrate on what he is being told. And yet what these officials are paid to say is very much worth hearing. Far more can be achieved for Britain's standing in the world by making it heard than by a thousand expensive

oversea publicity offices. For this squalid room is where his Majesty's Foreign Office, through its news department, presents itself to the world. This is the fountain head of information to which foreign correspondents representing hundreds of millions of readers must come if they want enlightenment and guidance on British foreign policy."

The moral, as the writer remarks, is

The moral, as the writer remarks, is that publicity, like charity, begins at home.

#### Lithographs for Schools

Coloured reproductions of paintings by the usual mechanical processes are notoriously unsatisfactory, and that in many cases there should be no other means of introducing children to good pictures is an anomaly which everyone concerned in visual education has been brought up against. For this reason a new series of signed lithographs in colour which is now being published for the special purpose of hanging in schools deserves a welcome. The artists to be represented are selected by a committee under the chairmanship of Herbert Read; their names to date include Kenneth Rowntree, John Skeaping, John Nash, Barbara Jones, Edwin la Dell, and Julian Trevelyan. Each picture is provided with its own border—a sensible idea calculated to do away with the necessity of framing. They are published in sets of four, one new set a term, and subscriptions, renewable annually, are confined to [continued\_on\_7page | kii

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The upper photograph shows all that remains of the Frauenkirche, Dresden, the most original and grandest of German Protestant churches; it was designed by Georg Bahr and built between 1726 and 1738.

The lower shows damage in the inner court A.R. 1:8:46 of the Zwinger.

continued from page [x]

schools; anyone interested should write to School Prints, 13, Motcomb Street, London, S.W.1.

#### CORRESPONDENCE

#### Planning Prospect\*

The Editor,

THE ARCHITECTURAL REVIEW
Six,—"The only safeguard for the carrying out of the executive's orders is compulsion." Which translated into the terminology of the totalitarian state, Fascist or Communist (your reviewer might be proselytizing for either), means in the light of current history, that the technician's theory can only be put into practice by the free use of the axe (Fascist), or the pistol (Communist); Auschwitz or Siberia.

After six years of bloody war fought for the preservation of a degree of individual freedom against the threat of its engulfment by the Gauleiter or his more cynical survivor, the Commissar, it is excessively distasteful to be confronted with the ugly clichés of the latter when perusing a journal devoted to the propagation of art and culture.

The smell of this particular review is only

culture.

culture.

The smell of this particular review is only heightened by the fact that the reviewer in question depends for his personal survival upon the victory of what he scoffingly describes as the "neo-liberal" outlook; that is the sometimes over-tolerant outlook of his host country.

If "the frequent quotation of sayings by the Prime Minister of the past Tory Government seems out of date to-day" how much more so does the advocacy of the totally efficient State, in which the "proletarian millionaires" lord it over the backs of a population boasting the lowest standards millionaires" lord it over the backs of a population boasting the lowest standards of living in the Western World, seem out of date, and, in your columns, out of place

\*Survey Before Plan, by E. G. R. Taylor. Reviewed by E. Goldfinger in the June issue.

It is out of place there because we know from the simplest visual evidence that since the inception of Bolshevist politics in Russia the arts in general and architecture in particular have been sinking deeper each Russia the arts in general and architecture in particular have been sinking deeper each decade into a morass of vulgarity without parallel in the history of civilisation. The same tendencies were latent in the other two totalitarian states, though a certain politically inspired dignity held them from sinking to quite the same depth. In both cases, Communist or Nazi, the new spirit of architecture is, was, taboo.

And how very clearly it must be so. Is not freedom, "le plan libre," the quintessence of the new architecture? How could a police-state house itself in an architecture that symbolised its antithesis? It is not true that "The only safeguard for the carrying out of the executive's orders is compulsion." It is also possible to explain and to persuade, though this may be more trouble and take much longer.

The end of planning is well-being, but the means condition the end.

Yours faithfully,

Yours faithfully, CLIVE ENTWISTLE.

#### The Post-War Car

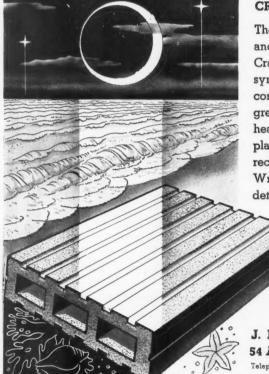
Mr. Alec Davis was responsible for compiling and writing the article which appeared in Design Review for July, on the Post-War Car.

#### Announcement

Convel Designers (Industrial Designers) Convel Designers (Industrial Designers) is the name by which Designers & Artistic Advisers will in future be known. Mrs. Gaby Schreiber informs us that Mr. Rolf Hellberg has recently joined her organisation after being released from the R.A.F. He is now also managing the Midland Office of Convel Designers in Coventry. Mr. John Richardson remains in charge of the Richardson remains in charge of the Textile Designing Department.

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